Master of MAGIC™

Explore and Conquer Magical Worlds

HARDWARE & SYSTEM REQUIREMENTS

To play *Master of Magic,* your computer must have:

- an 80386sx processor or better (for best play, we recommend at least a 33MHz 80386 or faster)
- at least 575K of free conventional memory
- at least 2.7MB of free EMS (expanded) memory
- VGA graphics or better
- a mouse

Software Compatibility Issues

Please note that this list includes only the known conflicts and incompatibilities. Since no test procedure can ever be totally comprehensive, you may run into undiscovered problems. Please consult with Customer Service if you do.

We strongly recommend that you do *not* run *Master of Magic* under either Windows 3.1 or Windows 95. We recommend running the game in MS-DOS mode.
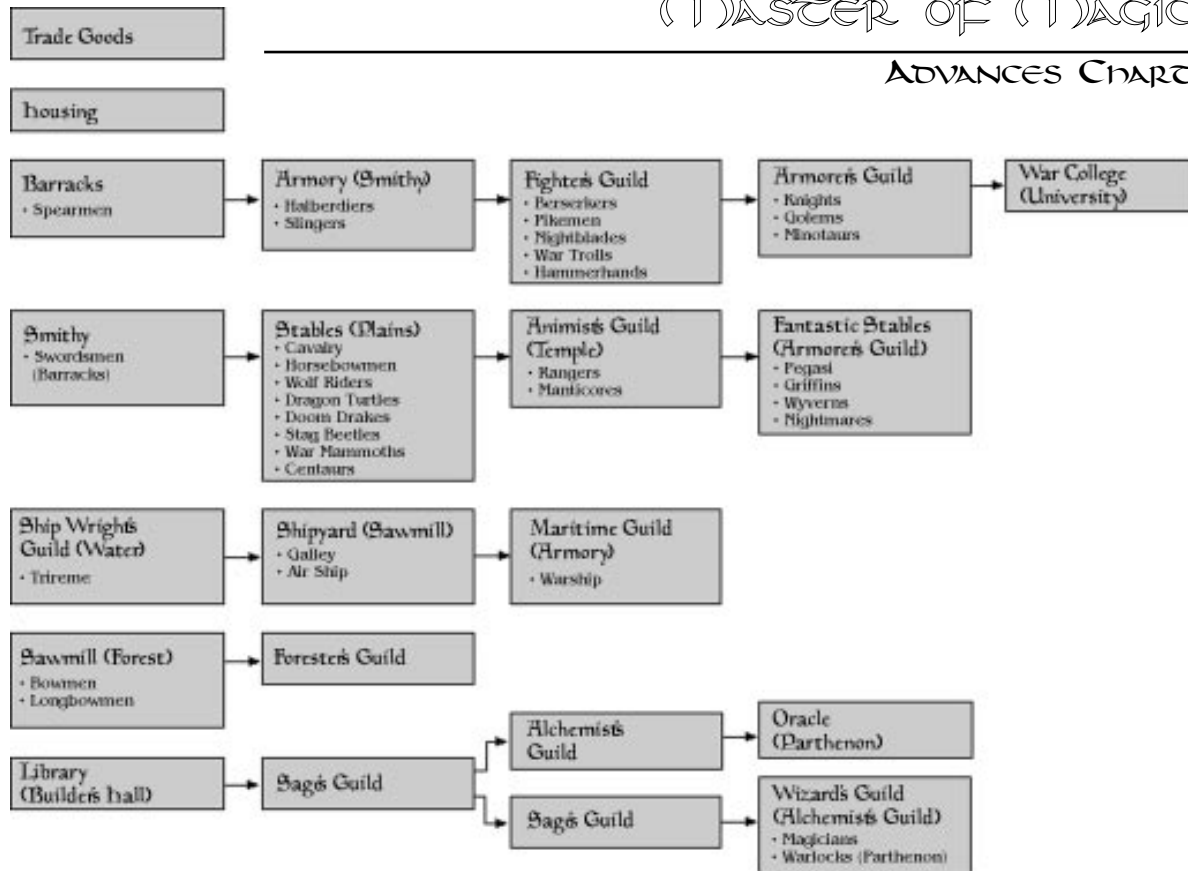
We strongly recommend that you not have any terminate-and-stay-resident programs (TSRs) loaded into memory when playing *Master of Magic*. Not only will they decrease the amount of free memory available, thus slowing the game, but there may be unpredictable interactions.
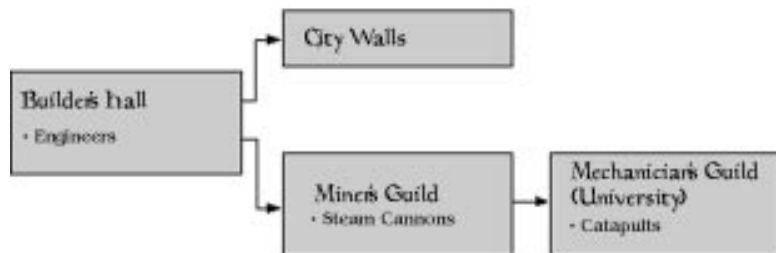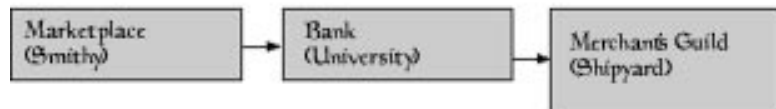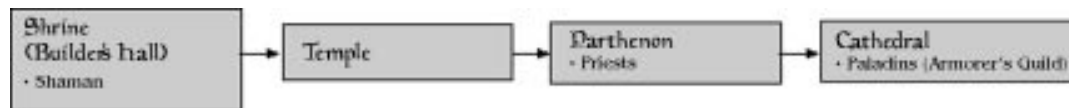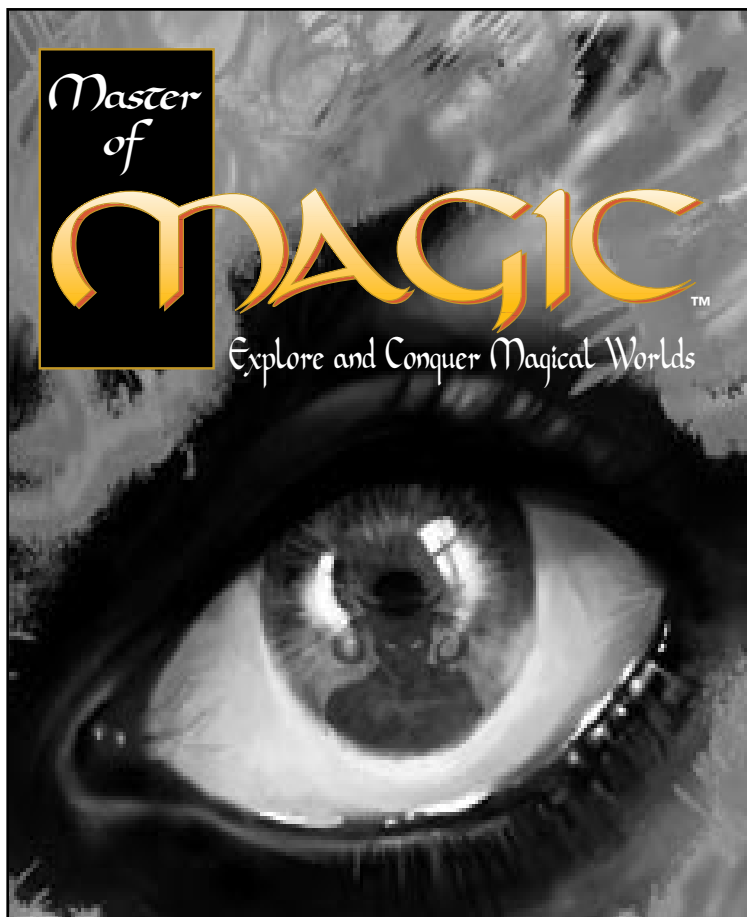
Configuration

As part of the installation process, you are prompted to select a few settings for your sound configuration. The installation program automatically detects the correct setup for the majority of sound cards, but you may need to change the defaults. If you do not know the correct numbers (DMA, IRQ, and such), please consult the documentation that came with your sound card.

Trade Goods

housing

Barracks
· Spearmen

→ **Armory (Smithy)**
· Halberdiers
· Slingers

→ **Fighters Guild**
· Berserkers
· Pikemen
· Nightblades
· War Trolls
· Hammerhands

→ **Armorers Guild**
· Knights
· Golems
· Minotaurs

→ **War College (University)**

Smithy
· Swordsmen (Barracks)

→ **Stables (Plains)**
· Cavalry
· Horsebowmen
· Wolf Riders
· Dragon Turtles
· Doom Drakes
· Stag Beetles
· War Mammoths
· Centaurs

→ **Animists Guild (Temple)**
· Rangers
· Manticores

→ **Fantastic Stables (Armorers Guild)**
· Pegasi
· Griffins
· Wyverns
· Nightmares

Ship Wrights Guild (Water)
· Trireme

→ **Shipyard (Sawmill)**
· Galley
· Air Ship

→ **Maritime Guild (Armory)**
· Warship

Sawmill (Forest)
· Bowmen
· Longbowmen

→ **Foresters Guild**

Library (Builders hall)

→ **Sages Guild**

→ **Alchemists Guild**

→ **Oracle (Parthenon)**

→ **Sages Guild**

→ **Wizards Guild (Alchemists Guild)**
· Magicians
· Warlocks (Parthenon)

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┌─────────────────────┐      ┌─────────────────────┐      ┌─────────────────────┐      ┌──────────────────────────────┐
│ Shrine              │─────▶│ Temple              │─────▶│ Parthenon           │─────▶│ Cathedral                    │
│ (Builder's hall)    │      │                     │      │ · Priests           │      │ · Paladins (Armorer's Guild) │
│ · Shaman            │      │                     │      │                     │      │                              │
└─────────────────────┘      └─────────────────────┘      └─────────────────────┘      └──────────────────────────────┘

┌─────────────────────┐      ┌─────────────────────┐      ┌─────────────────────┐
│ Marketplace         │─────▶│ Bank                │─────▶│ Merchant's Guild    │
│ (Smithy)            │      │ (University)        │      │ (Shipyard)          │
└─────────────────────┘      └─────────────────────┘      └─────────────────────┘

┌─────────────────────┐      ┌─────────────────────┐
│ Granary             │─────▶│ Farmer's Market     │
│ (Builder's hall)    │      │ (Marketplace)       │
└─────────────────────┘      └─────────────────────┘

                             ┌─────────────────────┐
                        ┌───▶│ City Walls          │
                        │    └─────────────────────┘
┌─────────────────────┐ │
│ Builder's hall      │─┤
│ · Engineers         │ │    ┌─────────────────────┐      ┌─────────────────────┐
└─────────────────────┘ │    │ Miner's Guild       │      │ Mechanician's Guild │
                        └───▶│ (University)        │─────▶│ (University)        │
                             │ · Steam Cannons     │      │ · Catapults         │
                             └─────────────────────┘      └─────────────────────┘
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MASTER OF MAGIC

Revised Edition

Game designed by SimTex Software

Introduction to *Master of Magic*

Imagine falling through time and space. You land in a world called Arcanus, a world something like medieval earth, yet one where the practiced arts of alchemy and magic are true and powerful. The creatures of fantasy (elves, orcs, klackons and such) that in our world have so far been dismissed as the products of fertile imagination, are reality on Arcanus. Here, these creatures are intelligent beings who, along with species unknown to Earth even in fantasy, form the myriad races that populate Arcanus. Beyond Arcanus there lies a mysterious second world, Myrror. Accessible only through ancient towers of wizardry or through the careful practice of some obscure forms of magic, Myrror is in all senses an alien world full of powerful magic, danger and creatures of the most fantastic ilk. The saying among wizards is that no one can truly rule Arcanus until they've cracked the Myrror.

Into these worlds you emerge as a fledgling wizard. Sparsely equipped with but a spell or two, you begin as the ruler of a tiny hamlet and its people. With these raw materials, you must build a thriving city, explore the two worlds of Arcanus and Myrror, expand your empire and learn new spells. In time, you will meet other wizards, each rising from equally humble beginnings, each having the same goal as you, namely conquering the worlds. How well you allocate resources, make use of your races' potentials, seize opportunities and negotiate with other wizards determines your eventual success. In the end, though, there can be only *one* Master of Magic!

Getting Started

Mouse Commands

We assume here that you understand basic mouse functionality, like clicking and dragging. Since your mouse has two buttons, the interface distinguishes between them. The following definitions refer to their usage in this manual.

- A "click" refers to placing the pointer over an area of the screen and clicking with the *left* mouse button.
- A "right-click" is a click with the *right* mouse button.
- "Opening a menu" requires a click on the name of the menu in the menu bar.
- "Selecting" means clicking on something.
- You "run" the mouse by moving it over an image or object *without* clicking.
- "Pressing a button" with the mouse means clicking on the screen button.
- "Toggling" means that you have only two options, and clicking the button flips back and forth between the two.

The Main Menu

After installing *Master of Magic* and entering the game, you begin at the *main menu*. This menu allows you to continue playing the last game you were running (an option not present the first time you start *Master of Magic*), to load a previously saved game, and to start a new game.

If this is your first time playing *Master of Magic* or if you wish to start a new game, click on the *new game button*. Otherwise, click on the appropriate button.

CONTINUE

Clicking on this button takes you back to the game you were playing last. Note that any game in progress is automatically backed up every four turns and "autosaved" into a temporary saved game file. The autosave feature writes over the previous autosaved game in this file.

LOAD GAME

Clicking on this button takes you to the *game options screen*. In that screen you can click on one of the saved game file names to reload that game.

NEW GAME

Clicking on this button takes you to the *new game screen* (described in the following section).

QUIT TO DOS

Clicking on this button exits *Master of Magic* and returns you to DOS.

The New Game Menu

1 f you choose to start a new game in the *main menu*, you are whisked to this screen. Here you can decide on several parameters (by clicking on the appropriate buttons to select or cycle through options) that will influence the nature of your new game of *Master of Magic*.

DIFFICULTY

Choose a difficulty level by cycling through the options (clicking on the difficulty button) until you find a suitable level. Depending on the difficulty level you choose, your wizard is advantaged (Intro and Easy settings), equivalent (the Normal setting), or disadvantaged (Hard and Impossible settings) relative to the computer player wizards. The difficulty level modifies your starting treasury. At Intro level, you start with 125 gold pieces in the treasury, at Easy you have 100 gold pieces, at Normal you start with 75 gold pieces, at Hard you start with only 50 gold pieces, and at the Impossible setting your treasury has a meager 25 gold pieces at the start of the game. The difficulty level also affects your production and population growth rates, as well as the speed with which your wizard researches new spells. In addition, with higher difficulty levels, the skill with which enemy wizards set about conquering the worlds of Arcanus and Myrror increases (at Hard and Impossible levels, they also have more spell picks than you do), while their tolerance toward your diplomatic advances, faux pas and aggressive actions decreases. We warn you, the Impossible setting is aptly named!

The Universal Help Button

IMPORTANT NOTE: Regardless of the difficulty level that you choose, on-line help is always available! Right-clicking on almost any area of almost every screen in the game provides you with "HELP" information and definitions. Clicking then takes you back to where you were in the game.

OPPONENTS

Choose the number of enemy wizards (from one to four) playing against you by clicking on the *opponents button*. Beside determining how many wizards you are competing against, the number of opponents influences how rapidly you are likely to come in contact with another wizard. While contact with enemy wizards can have positive aspects (for example, being able to trade spells), it also has potential negative aspects, since tensions tend to escalate as you become more powerful. Thus, having time to research useful spells and to establish a few cities for a stronger power base before encountering another wizard definitely has its advantages.

LAND SIZE

The *land size button* controls the approximate size of continents (small, medium and large) and the proportion of the worlds' surface areas that are land. Click on the *land size button* to cycle through the options.

In choosing a land size, consider the relative advantages of each option. Land size affects how quickly you establish contact with other wizards. Because small land sizes result in the creation of many islands separated by vast expanses of water, choosing this option generally results in delayed contact with opponents, while choosing large land sizes results in almost immediate contact.

While smaller land sizes delay contact with enemy wizards, they also hamper exploration and expansion efforts. Because new cities must be separated from pre-established cities by a minimum distance of three squares, founding new cities with adequate resources to support a reasonably sized community on small continents may be difficult.

MAGIC STRENGTH

There are a number of sources of magic power in the worlds of *Master of Magic*. These can be divided into two groups: nodes and city-based sources (such as shrines and temples). Clicking on the *magic button* (options are Weak, Normal and Powerful) allows you to choose how strong nodes are as a source of magic power (mana). Weak nodes produce half the magic power of Normal nodes, while Powerful nodes produce 50% more magic power than Normal nodes.
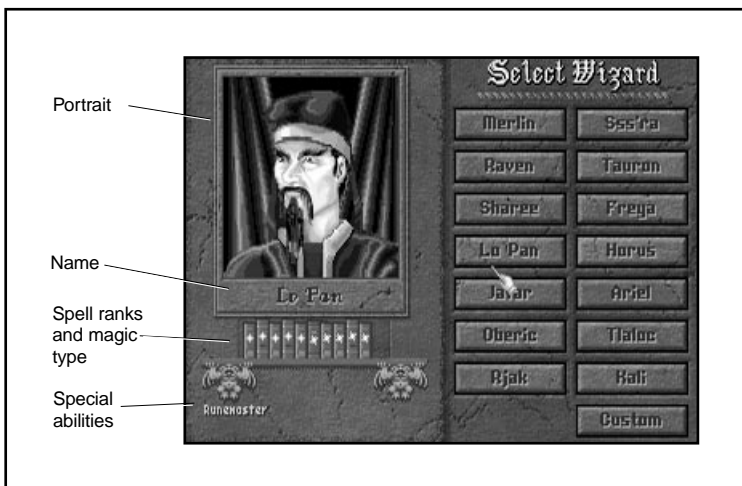
Because magic power is vital to the spell researching and spell casting efforts of the battling wizards on Arcanus and Myrror, when nodes are powerful sources of magic, enemy wizards aggressively attempt to gain control of them. When nodes are weak sources of magic, city-based sources of magic power become relatively more important, encouraging enemies to accelerate both expansion efforts and the development of their cities.

OK OR CANCEL

Once you are satisfied with the parameters of your new game, click on the *OK button* to move to the next screen (*wizard creation*). Alternatively, you can click on the *cancel button* to return to the *main menu*.

Choosing or Creating Wizards

1 f you are playing at the Intro (tutorial) or Easy setting, you have to choose (by clicking with your mouse on one of the wizards' names) one of the predesigned wizards described in **Choosing a Wizard**. At any other difficulty setting, you have the option of choosing a wizard or designing your own (by clicking on the *custom button* when in the *wizard creation screen*). Important information on how to create your own wizard is described in **Creating a Wizard**.

Select Wizard

Portrait

Name

Spell ranks and magic type

Special abilities

Lo Pan

Runemaster

Merlin — Sss'ra
Raven — Tauron
Sharee — Freya
Lo Pan — Horus
Jafar — Ariel
Oberic — Tlaloc
Rjak — Kali
Custom

CHOOSING A WIZARD

When you run your mouse over the name of one of the fourteen predesigned wizards, you see a display of that wizard's spell ranks and special abilities under his or her portrait. *Spell ranks are the spell books that wizard has available for study.* Each book has a mark on its binding

which indicates the kind of magic described in the tome. The more books that a wizard owns in a particular kind of magic, the more rare and powerful spells he or she can learn in that subject.

There are five types of magic in which wizards can specialize:

- **Life magic** (indicated by white ankhs on the spell book bindings) is focused on healing, protective and inspirational spells. This magic has healing spells so powerful that the dead can be resurrected. It is also the only type of magic to offer spells that allow creatures to travel between the worlds (planes) of Arcanus and Myrror. This form of magic has elements that strongly oppose death magic and some that mildly oppose chaos magic.
- **Death magic** (indicated by purple skulls on the spell book bindings) concentrates on controlling the forces of darkness. This magic provides spells for summoning dead creatures, corrupting enemy wizards' power bases, instilling fear in the hearts of enemies, blighting land and causing misfortune of all types to befall foes. Because life and death magic are so strongly antithetical, no wizard can specialize in both of these magic types.
- **Chaos magic** (indicated by red fireballs on the spell book bindings) specializes in wreaking havoc on the surrounding world by twisting and warping creatures, weapons and nodes. When change alone is not enough, this magic can call forth the destructive elements of fire and lightning to do its bidding.
- **Nature magic** (indicated by green trees on the spell book bindings) claims as its domain spells that encourage fertility and growth. Rooted in the land, this magic can call upon the elements of stone and water to smite enemies with earthquakes and ice bolts. This magic may also call upon the earth's wisdom to explore areas of the worlds and see things that are far beyond the normal range of sight.
- **Sorcery magic** (indicated by blue diamonds on the spell book bindings) focuses on creating illusions and controlling the elemental force of air (even to the extent that individual creatures can be endowed with the control of air through flight). When all else fails, however, sorcery magic has another area in which it reigns supreme: meta-magic, or the ability to control and resist other wizards' spells!

In addition to the five magic types noted above, there is a sixth type, arcane magic, that requires no spell ranks to learn. Arcane magic is available to all spell casters.

- **Arcane magic** is the most basic of all magic on Arcanus and Myrror. Its spells allow wizards to summon heroes (see **Heroes**), to create amazing objects of great power (see **Artifacts**) and to cast basic magic spells, such as those that remove spells that have been cast on your wizard by enemies. *All arcane magic spells are automatically placed into your spell library to learn when you are ready*. These spells, therefore, require no spell books to learn (i.e., you do not choose arcane spell ranks).

Below the shelf containing the spell books, you see any special abilities the highlighted wizard possesses. These attributes are described in **Special Abilities**. Brief summaries of these special abilities are also included, when relevant, with the descriptions of the predesigned wizards.

What follows is a list of the fourteen predesigned wizards. If you wish to play as one of these wizards, click on his or her name. If you wish to design your own wizard, go to **Creating a Wizard**.

- **Ariel** is a high priestess who specializes in life magic. With ten spell books (ranks) in life magic, Ariel can learn all life magic spells. In addition to her extensive knowledge of this field, Ariel is a gifted diplomat. Her special ability (Charismatic) doubles the effectiveness of any positive diplomatic actions she takes and halves the negative impact—that is, how she is viewed by enemy wizards when she commits unfriendly acts. In addition, her charisma allows her to purchase magic items and to hire heroes and mercenaries at half price.

- **Freya** is an elven nymph who specializes in nature magic. With 10 spell ranks in nature magic, she can learn all the spells in this area. She also possesses the special ability of Nature Mastery, which increases the speed with which she can research nature spells. The ability of Nature Mastery makes Freya's nature spells twice as difficult to dispel, while allowing her to draw double the normal amount of magic power from any nature nodes under her control.

- **Horus** is a sorcerer who specializes in both sorcery and life magic (having five spell ranks in each of these areas). Horus is also an Archmage, which makes him particularly effective at casting spells. This ability also makes his spells twice as difficult to dispel. Interestingly, Horus is the most erratic of the known wizards and is not always fully aware of his potential. Thus, when he is controlled by the computer (as an enemy wizard), he may have radically different areas of specialization than those noted here.

- **Jafar** is an Arabian illusionist who understands the mysteries of sorcery magic. With 10 spell ranks in sorcery magic there are few spells in this area missing from his spell library. Jafar is also an alchemist (his special ability is Alchemy), which allows him to interconvert gold and magic power at no cost.

- **Kali** is a witch who specializes in both death and sorcery magic (having five spell ranks in each of these areas). She also has the special ability of Artificer, which allows her to draw double the usual amount of magic power from nodes under her control.

- **Lo Pan** is an oriental mystic who specializes in both chaos and sorcery magic (having five spell ranks in each of these areas). Lo Pan has developed the ability to channel magic power directly from his location in the enchanted fortress to his troops on the battlefield (special ability of Channeler). This ability allows him to bypass paying higher mana rates for casting combat spells outside of his fortress.

- **Merlin** is a great wizard who specializes in both nature and life magic (having five spell ranks in each of these areas). Merlin is also a sage (special ability of Sage Master), which tremendously increases the speed with which he researches (and learns) new spells.
- **Oberic** is an elementalist who specializes in both chaos and nature magic (having five spell ranks in each of these areas). He also possesses the special ability of Mana Focusing, which significantly increases the amount of magic power he can obtain for his mana reserves.
- **Raven** is an Indian shaman who specializes in both nature and sorcery magic (having five spell ranks in nature and six spell ranks in sorcery). In preference to developing some special skill, Raven has chosen to concentrate his efforts solely on the acquisition of spell knowledge.
- **Rjak** is a warlock who specializes in death magic. With nine spell ranks in this area, he has almost all death magic spells in his spell library. Further enhancing his fearsome powers, Rjak has developed the special ability of Infernal Power. This special ability increases the amount of magic power he draws from the shrines, temples and parthenons that have been bent to his worship.
- **Sharee** is a voodoo priestess who specializes in both chaos and death magic (having five spell ranks in each of these areas). Sharee is also a Conjurer (special ability), allowing her to summon creatures for far less mana than normally required.
- **Sss'ra** is a draconian warlock who specializes in both chaos and life magic (having four spell ranks in chaos magic and five in life magic). In addition, he is a Myrran (special ability) which places him on the world (or plane) of Myrror at the beginning of the game. He also starts with a special race (beastman, dark elf, draconian, dwarf or troll) to control. Not bad!
- **Tauron** is a demonic being who specializes in chaos magic. With ten spell books in this area, he can learn all chaos magic spells. Tauron also possesses the special ability of Chaos Mastery, which increases the speed with which he researches new chaos spells. Chaos Mastery makes it more difficult to dispel his chaos spells and doubles the magic power Tauron can draw from any chaos nodes under his control.
- **Tlaloc** is an Aztec priest who specializes in both nature and death magic (with five spell ranks in death magic and four in nature). Tlaloc is also a Warlord (special ability), which automatically adds an experience level to each of his units. His units can even surpass the normal highest level for troops (elite).

CREATING A WIZARD

To design your own wizard, click on the *custom button* when you are in the *wizard creation screen*. This option is not available if you are playing at the Intro level or Easy level of difficulty.

Select Picture

After you decide to custom design a wizard, you choose a picture for your wizard from one of the fourteen predesigned wizard portraits. Run the mouse cursor over the wizards' names to bring up their portraits in the frame on the left side of the screen.

Wizard's Name

A space appears next to the portrait you chose for your new wizard. The default name of that picture's predesigned wizard appears in this space. You may choose to use this name or enter a name of your own choosing (it may have no more than ten letters). When you are satisfied with the name, hit the [Enter] key to continue.

Spell Picks

After you have chosen a name for your new wizard, you zip to the *spell picks screen*. Here you must choose how many spell books (ranks) and which special abilities to give to your wizard. You have eleven "spell picks" to divide between spell ranks and special abilities. Each spell pick can be used to get another spell book (the only restriction here is that no wizard may be versed in both death and life magic) or another special ability (some special abilities cost two spell picks; see **Special Abilities**).
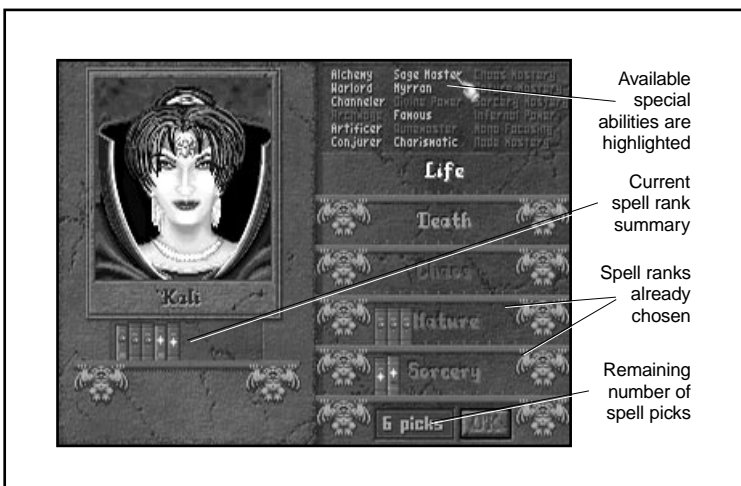
You can select (or if you change your mind, deselect) a special ability by clicking on its name in the *spell picks screen*. Special abilities that are available to your wizard (this depends on which spell ranks you have already selected) are highlighted in white. All special abilities you have chosen appear beneath the portrait of your wizard.

Spell ranks are selected or deselected by clicking on the "bookshelves" next to the name of the magic type (life, death, chaos, nature or sorcery). For example, to select two spell ranks in life magic, click on the second slot from the left on the bookshelf next to the word "Life." If, later during the selection process, you decide that you do not want any ranks in life magic, click to the left of the bookshelf (i.e., on the left gargoyle). You can add or subtract ranks (as long as you have enough spell picks to do so) by clicking on different bookshelf slots until you are satisfied with your combined selection of spell ranks and special abilities. When you have used up all of your spell picks to your satisfaction, click on the *OK button* to get to the next screen (the *select spell screen*).

Relevant factors in choosing spell ranks and special abilities are described in **Spell Ranks** and **Special Abilities**.

Spell Ranks

Note that wizards may only cast spells they know. The most common way to learn a spell is to research it. Wizards may only research and cast spells from those magic types for which they have spell books. Arcane magic spells are the only exception; these can be learned by all wizards and, therefore, require no spell books. Listed below are the six types of magic practiced on Arcanus and Myrror.

- **Life magic** (white) focuses largely on healing and protective spells.
- **Death magic** (black) focuses on summoning and controlling the dead and calling into existence other manifestations of evil. Life and death magic are so strongly opposed in nature that no wizard can learn both types of magic spells.
- **Chaos magic** (red) can be used to control the element of fire and the forces of change primarily for destructive purposes.
- **Nature magic** (green) is used to control the forces of both water and the earth itself. While largely a constructive magic (focused on growth), nature magic can generate strongly destructive spells.
- **Sorcery magic** (blue) focuses on the control of the element of air and all apparently insubstantial things. Sorcery spells can generate and sustain illusions and control the spells of other wizards in addition to more concretely harnessing the force of air for other purposes.
- **Arcane magic** (gray) is accessible to all wizards. All arcane magic spells are automatically placed in new wizards' spell libraries for future research.

In addition to belonging to one of the six magic types (colors), each spell has a certain degree of rarity (common, uncommon, rare and very rare) associated with it. Rare spells tend to be more powerful than common spells. To be able to learn the rarer spells of a particular magic type, a wizard must have a greater degree of knowledge (i.e., more spell ranks) in that area.

When creating a wizard, you have to choose which magic types (life, death, chaos, nature or sorcery) your wizard learns and how much understanding (in terms of the number of spell ranks) he or she has in each studied area. Wizards can concentrate on one magic type or dabble in several. The only limitations are that 1) a wizard cannot have more than eleven (minus the number of special abilities you select) spell ranks and 2) a wizard cannot learn both life and death magic spells. The number of spells a wizard *can* learn, based on the number of spell books chosen in a particular magic area, is discussed below.

Every wizard in *Master of Magic* has a spell library which represents those spells that the wizard can research and learn. This library is composed of spell books (called ranks). Each spell rank contains cryptic information on spells of a specific type of magic (life, death, chaos, nature or sorcery). The more spell ranks a wizard has in a particular area, the more spells he or she can research in that area. Also, a wizard can learn spells of greater rarity if he or she has more spell ranks in the relevant area.

For example, if your wizard has two spell ranks in death magic, he or she automatically gets five common spells, two uncommon spells and one rare death magic spell in his or her library. Although you cannot choose all of the death spells in that library (you can only choose one common death magic spell that is definitely there; the rest are randomly chosen by the program), you can be certain of having this many potential death magic spells to research and learn. The table entitled **Spell Ranks** shows how the number of spell ranks in a particular magic area affects how many spells (of a particular rarity) a wizard has in his or her spell library.

The number of spell ranks that a wizard has in a particular area of magic also dictates which spells the wizard can acquire through trade or when exploring dungeons, towers, ancient ruins and other places. For example, if a wizard cannot learn *any* very rare spells in a particular area (i.e., if the wizard has fewer than three spell ranks of that magic type), then he or she can *never* acquire very rare spells of that magic type through trade or exploration. Note that acquiring spells through trade and exploration is a quick and simple means both of learning new spells and of expanding a wizard's spell library. Researching spells can take a considerable period of time.

Table A: Spell Ranks in the **Appendix** shows the total number of spells (of each rarity) you learn and the number of guaranteed choices you lock in, based on the number of ranks you choose in a color or magic type.

Special Abilities

Beside choosing spell ranks when you create a new wizard, you can use one or more of your eleven spell picks to endow your wizard with special abilities. Available choices are highlighted in white. Note that several of the special abilities have prerequisites. As an example, for the special ability Infernal Power to become available (become highlighted), you must have chosen at least four spell books in death magic.

To select or deselect a special ability, click on its name when you are in the *spell picks screen.* Selected special abilities are highlighted in yellow with a checkmark next to their names (on the right side of the screen); they also appear below your wizard's portrait. The special abilities available are listed and described below:

- **Alchemy** allows a wizard to directly interconvert gold and magic power. The conversion process normally results in a loss of 50% of the starting material (you convert 100 gold into 50 mana). With Alchemy, you can convert on a straight one-for-one basis.

- **Archmage** increases a wizard's spell casting skill by ten. It is also twice as difficult for an enemy wizard to dispel an Archmage's spells. *To become an Archmage, a wizard must have a minimum of four spell books in one of the magic types.*

- **Artificer** allows a wizard to make powerful magic items at a significantly reduced cost (33% less than normal). Artificers also start the game knowing the arcane spells of create magic item and create artifact, so that they can use their ability from the outset.

- **Channeler** allows a wizard to cast combat spells without paying any extra costs. Normally, a wizard must pay extra mana to cast a combat spell anywhere other than his or her "enchanted fortress" (e.g., starting city). This surcharge represents the mana that is dissipated over the distance between the wizard's power base (at the enchanted fortress) and the battle site. Channelers are much more efficient at transferring the necessary magic power and, therefore, do not have to pay extra mana to cast spells during combat in locations outside their enchanted fortresses.

- **Chaos Mastery** enhances a wizard's use of chaos magic in many different ways. This skill doubles the magic power that a wizard can draw from chaos nodes under his or her control and increases the speed with which the wizard researches new chaos spells. In addition, chaos spells cast by a wizard with this special ability are twice as difficult to dispel. *A wizard must have a minimum of four spell ranks in chaos magic to choose Chaos Mastery.*

- **Charismatic** gives a wizard a great advantage in all interactions with other wizards, mercenaries, merchants and heroes. This ability allows a wizard to purchase artifacts from merchants at half price and to hire mercenaries and heroes at half the usual cost. In addition, a Charismatic wizard obtains twice the normal effect from positive diplomatic actions he or she initiates and suffers only half the normal penalty for negative diplomatic actions.

- **Conjurer** allows a wizard to cast summoning spells at 25% less than the usual cost.
- **Divine Power** dramatically improves the effectiveness of shrines, temples, parthenons and cathedrals in cities owned by a wizard. The magic power obtained from these city-based sources is increased by 50%, and the pacifying effects (ability to reduce unrest in a city's populace) of these institutions are enhanced. *A wizard must have at least four spell ranks in life magic before you can choose Divine Power. This special ability costs two spell picks.*
- **Famous** doubles the rate at which a wizard is approached by heroes and mercenaries looking for work and by merchants selling valuable artifacts. This effectively increases the options a wizard has in rounding out his or her armies and armory. Famous wizards also start the game with a significant amount of fame (see **Fame**), while wizards without this ability start with very little! *This special ability costs two spell picks.*
- **Infernal Power** is the death magic counterpart to Divine Power. All shrines, temples, parthenons and cathedrals in cities owned by the wizard yield 50% more than the usual amount of magic power. These institutions are also more effective than normal at reducing local unrest. *A wizard must have a minimum of four spell ranks in death magic to choose Infernal Power. This special ability costs two spell picks.*
- **Mana Focusing** increases the effectiveness of the mana drawn from a wizard's magic power reserves by 25%. In other words, every four mana the wizard uses to cast spells counts as five. *A wizard must have at least four spell ranks in one magic area to select this special ability.*
- **Myrran** places a wizard on Myrror at the beginning of the game (otherwise, all wizards start on Arcanus). Myrran wizards may choose to begin the game with one of the special races (beastmen, dark elves, draconians, dwarves or trolls) that are otherwise not available to starting wizards. Because Myrror is a world richer in magic than Arcanus, the Myrran wizard's enchanted fortress generates double the magic power of an equivalent fortress on Arcanus. *This special ability costs two spell picks.*
- **Nature Mastery** markedly enhances a wizard's use of nature magic. This special ability increases the speed with which a wizard researches new nature spells. It also makes nature spells cast by a wizard with this special ability twice as difficult to dispel. Finally, Nature Mastery allows a wizard to draw double the amount of magic power from nature nodes he or she controls. *A wizard must have a minimum of four spell books in nature magic to choose this ability.*
- **Node Mastery** doubles the amount of magic power that a wizard draws from nodes of all types. *A wizard must have at least one spell rank each in chaos, nature and sorcery magic before he or she can select Node Mastery.*
- **Runemaster** improves the strength of all spells cast by a wizard (spells cast by a Runemaster are twice as difficult to dispel than normal). This ability increases the speed with which a wizard can learn arcane (i.e., gray-colored, "generic") magic spells and also allows a wizard to cast arcane magic spells at a reduced cost. *A wizard must have at least two spell ranks each in any three different magic types to select Runemaster.*

- **Sage Master** greatly increases the speed at which a wizard researches *all* spells. *A wizard must have a minimum of one spell book in at least two different magic areas to qualify for this special ability.*
- **Sorcery Mastery** enhances a wizard's use of sorcery magic in many different ways. This special ability increases the rate at which a wizard researches new sorcery spells and doubles the amount of magic power that the wizard can draw from sorcery nodes under his or her control. In addition, Sorcery Mastery makes sorcery spells cast by a wizard twice as difficult to dispel as normal. *A wizard must have a minimum of four spell ranks in sorcery magic to select this ability.*
- **Warlord** improves the quality of a wizard's troops. All troops under the wizard's control gain one extra level of experience over their actual training and experience. While troops cannot normally achieve a level higher than "elite," equivalently experienced troops under a Warlord's control fight at an "ultra-elite" level. *This special ability costs two spell picks.*

Select Spells

After you have allocated your eleven spell picks to spell ranks and special abilities, click on the *OK button* at the bottom of the *spell pick screen* to advance to the *select spells screen*.
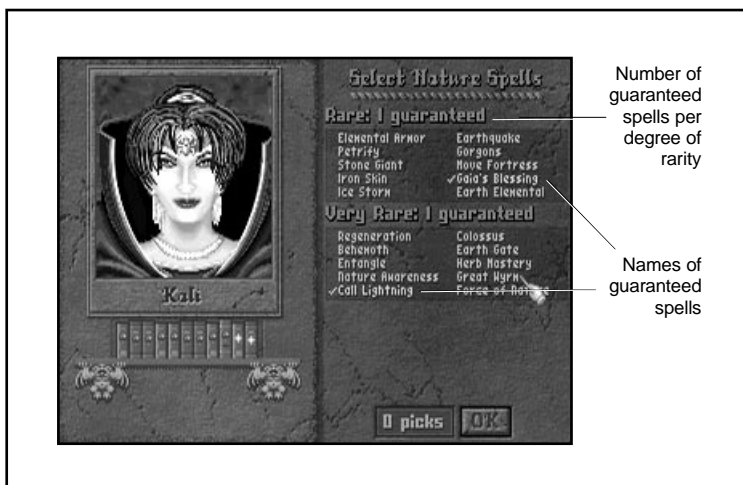
The *select spells screen* allows you to choose which spells are *definitely* in your spell library. Most of the spells in your spell library (the spells which you can eventually research) are randomly determined by the computer when it creates the game world. However, if you choose enough spell ranks in a particular magic area, you can guarantee the presence of a few specific, key spells in your spell library. Note, these are *not* spells that you know (i.e., can cast) at the beginning of the game; they are simply spells that you can eventually research.

When you enter the *select spells screen*, notice some spells are already highlighted in yellow with a check mark to their left. These are the default spell selections. If they are satisfactory, just click on the *OK button* at the bottom of the screen to continue. If you wish to make your own selections, click on the currently selected spells to deselect them, then select your own choices (a list and description of all available spells is given in the **Spellbook** supplement) by clicking on the spells you want. The number of spells you may select in each rarity category is indicated on the top line of that category's section. Chosen spells are highlighted in yellow. When you are satisfied with your guaranteed spell selections, click on the *OK button* to go to the next screen.

Select Race

After you have chosen your guaranteed spells, you zip to the *select race screen*. The races available for your starting city depend on whether you chose the special ability Myrran (see **Special Abilities**). Myrrans start on the world of Myrror and have the choice of beginning the game with beastmen, dark elves, draconians, dwarves, or trolls—as well as any of the remaining nine "regular" races. All other wizards begin on Arcanus and may *only* choose from one of the other nine races: barbarians, gnolls, halflings, high elves, high men, klackons, lizardmen, nomads or orcs.

To select your villagers, click on one of the highlighted races; races that are not highlighted are not available.

Although choosing a race at the beginning of the game is an important decision, a "poor" selection for your specific situation should not be viewed as irreversible. You can always set out to conquer neutral cities which are populated by other races more useful to your needs. This allows you to ultimately make use of many races' special advantages and abilities.

Basic information on the capabilities of most races (and those races that differ from the norm in these areas) is shown below (For specifics see **Table B: Race Comparison** in the **Appendix**). The values given for production of an item per person are on a per-game-turn basis. A "person" represents 1000 beings, symbolized by a single figure in the *city screen* (see **City Population**).

- **Food:** All races harvest two units of food per farmer except for halflings, which produce three.
- **Production:** All races are equally productive (one production unit per worker) except for klackons, which are 50% more productive than everyone else.
- **Gold:** You determine how much gold each town generates by setting the tax rate. By default, the tax rate starts at one gold per figure, but you can set it anywhere from one-half to three gold per figure, in half coin increments. Dwarf workers produce double the tax rate, and nomads produce 50% more.
- **Magic Power:** Only four races have an inherent ability to generate magic power! Beastmen, draconians and high elves can each produce half a unit of magic power per person. Dark elves are the most magical of all races and can produce one unit of magic power per person.

- **Maximum City Population:** Some races are less tolerant of crowding than others. Their cities have lower maximum population sizes as follows: trolls and dark elves have four fewer people per city; dwarves have three fewer people per city; draconians, gnolls, high elves and klackons each have two fewer people per city than "normal."
- **Population Growth Rates**: Races have different population growth rates. Normal population growth rates depend mostly on the difference between the maximum size of a city and its current population. The larger this difference, the faster a city grows. The population growth rate can be found on the *city screen* in parenthesis after the actual population. Of the races, draconians, gnolls, klackons and nomads have slow growth rates; dark elves, dwarves, high elves and trolls have the slowest growth rates of all the races. Lizardmen have fast growth rates; barbarians have the fastest growth rates of all. Outpost growth rates reflect the abilities of races to establish new cities. While not identical to population growth rates, outpost growth rates roughly correspond to the races' population growth rates.
- **Natural Dispositions:** Some races are inclined to get along with other races even after they capture one another's cities or after one of their cities is captured. Others races tend to seethe with anger and rebellion when their cities are taken and have, in general, such an intense aversion to other races that even when *they* conquer other races' cities, this hatred generates a large rebellious contingent in the populace. Generally, halflings are the most congenial race of all and very little unrest develops among their townsfolk when their cities are controlled by other races, or when they control other races' cities. Barbarians, gnolls, high men, lizardmen, nomads and, surprisingly, orcs are also pretty easy going vis-à-vis occupation policies. Dark elves, dwarves, high elves, klackons and trolls, however, can create plenty of unrest when their cities are occupied or their race conquers another race's city among this listing. Particular animosity exists between the high and dark elves, between the dwarves and elves, and among the trolls, dwarves and elves. Any combination of these is likely to require a conqueror to build several religious institutions just to keep the rebel populace in check. (See **City Population**, **Building Types** and **Imperialism** for more information.)
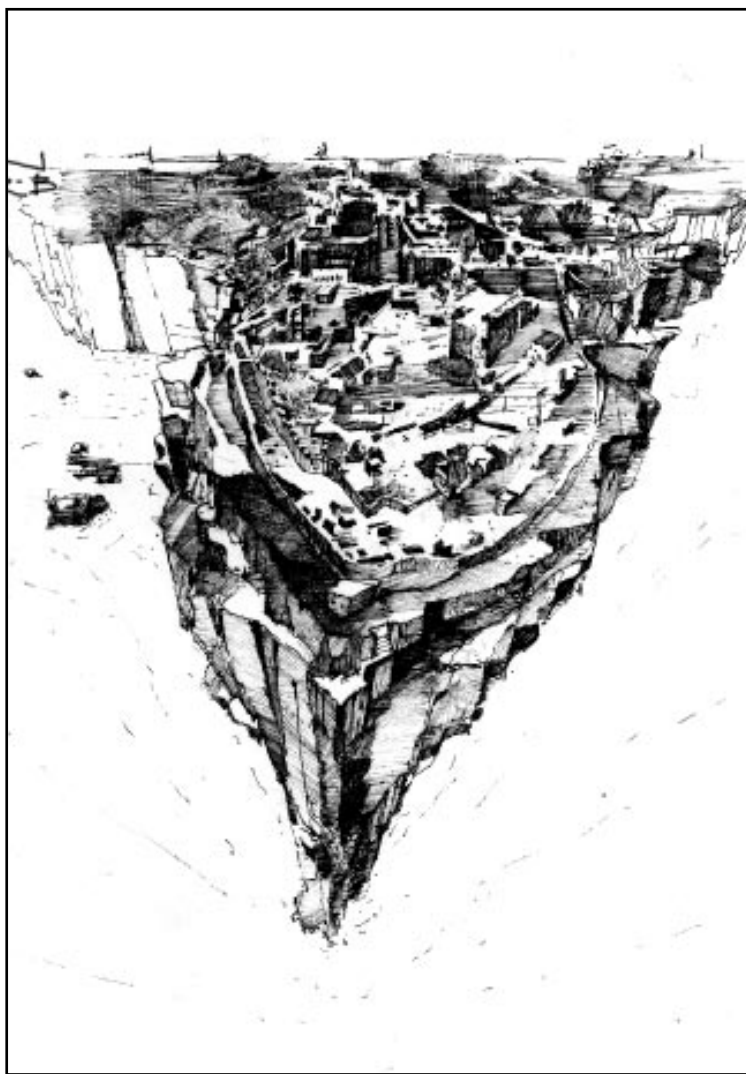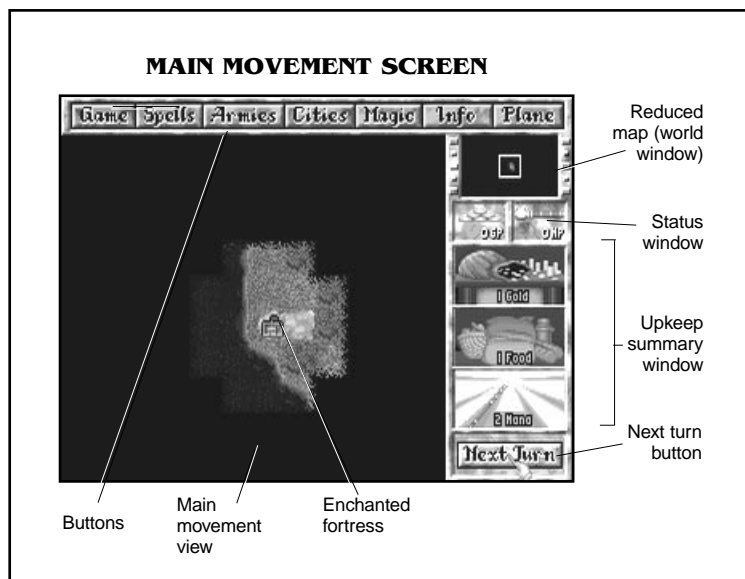
Select Banner

After you have chosen one of the predesigned wizards, or upon completing the creation of your own wizard, you enter the *select banner screen*. Click on one of the five banners (green, yellow, blue, purple or red) to select the color your troops will follow. After you choose, the program generates the worlds of Arcanus and Myrror according to the parameters you selected in the *new game screen*. During world generation, the program also determines which non-guaranteed spells are in each wizard's spell library. When creation of the new worlds is complete, you are plunked onto the *main movement screen* of the game, in control of a city bearing a flag of your chosen color.

Select Home City Name

The last step before starting to play a game of *Master of Magic* is deciding whether or not to accept the default name for your wizard's home city. After the worlds are created, you have the option to alter the name of your starting city or to accept the default selection. In addition, if you have chosen to play on the Easy setting, you are asked if you wish to use the grand vizier to manage the production of buildings in your cities (see **Grand Vizier**). With that decided, you are ready to start playing!

Beginning the Game –
The Main Screen

MAIN MOVEMENT SCREEN

Reduced map (world window)

Status window

Upkeep summary window

Next turn button

Buttons

Main movement view

Enchanted fortress

The main movement screen of *Master of Magic* is where most of the game play takes place. This introductory section contains a very brief description of each area of the main movement screen. The sections that follow describe each of these areas in detail.

There are seven buttons (game, spells, armies, cities, magic, info and plane) across the top of the screen. Clicking on these buttons takes you to new screens or menus.

·   The *game button* takes you to the *game options menu,* from which you can load and save games.
·   The *spells button* takes you to a list of spells that you can currently cast. At the beginning of most games, the only spell in this spell book is magic spirit (an arcane magic spell described in the **Spellbook** supplement).
·   The *armies button* takes you to a screen that shows all armies and heroes that you currently control. At the beginning of the game, you have no armies, so this screen is empty.
·   The *cities button* takes you to a list of your current cities and outposts. At the beginning of the game, the only city on this list is your starting city (a.k.a. your "enchanted fortress").
·   The *magic button* takes you to a screen where you can examine and modify how your magic power is being distributed over the areas of spell research, spell casting skill and mana reserves. There are a series of empty "mirrors" or gems at the top of this screen that eventually display the faces of any opposing wizards in the current game; these mirrors are the means by which you communicate with all known wizards.

- The *info button* takes you to a long list of advisors. Clicking on the *advisor buttons* provides you with important information about the world, your spell library, other wizards, etc.
- The *plane button* switches you between the worlds of Arcanus and Myrror. At the beginning of the game you have no means to travel to a different plane. Eventually you will be able to use the *plane button* to move troops between these two worlds.

The *reduced map (world window)* is on the top-right side of the *main movement screen*. Clicking on a site on this map centers the *main movement view* on that site.

The *status window* below the reduced map shows the amount of gold and mana in your reserves.

The *upkeep summary window* shows how much net gold, food and mana you are producing every turn. If one of these numbers is colored red, then you are losing the displayed amount of that item each turn! When this happens, you probably want to take appropriate measures to correct this per turn deficit spending (you're not the US Government, after all!). Note that surplus gold and mana are added to the amounts shown in the status window each turn, while surplus food is converted to gold at a rate of one gold piece per two surplus food units. The *upkeep summary window* is replaced by the *unit window* when it is time for an active unit to move.

In the bottom right corner of the *main movement screen* is the *next turn button*. Clicking on this button means you are done with this turn and takes you to the next turn in the game. This updates all of your economic, diplomatic and research data by one turn and allows your units to start a new turn of movement.

The largest section of the *main movement screen* is occupied by the *main movement view*. Here you can see a small town with a flag on top that represents your starting city (aka "enchanted fortress"). All exploration, troop movement and building of outposts and roads takes place in this viewing area.

Game

C licking on the *game button* takes you to the *game options screen.*

The *game options screen* can be used to save and load games, to quit to DOS and to adjust game settings.

Save slots
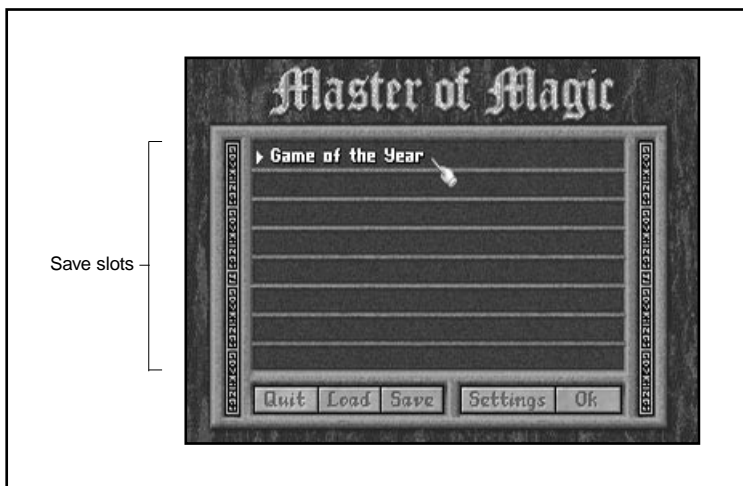
SAVING

To save a game, click on one of the eight slots in the middle of the screen. A cursor appears. Type in a name or short description for the game in progress and then click on the *save button* at the bottom of the screen. If there is already a name in the saved game slot you selected, you can either save the current game under that name (by clicking on the *save button* after selecting the game in that slot) or you can change the name in the slot by backspacing over the current name and typing in a new one. After hitting the Enter key or clicking the *save button,* you immediately return to your game.

LOADING

To load a previously saved game, click on the slot in which that game was saved. The name or description of that saved game is highlighted. You can then click on the *load button* to resume playing the saved game.

SETTINGS

Clicking on the *settings button* takes you to the *game settings screen.* The following list of settings can be toggled on or off (by clicking on them), depending on your preference. A check mark appears in the small box to the left of each setting that is currently on.

Sound Effects should be turned on if you wish to listen to the sound effects. This setting is ignored if your sound card does not support digitized speech.

Background Music should be turned off if you do not wish to have continuous music playing in the background during your game.

Event Music should be turned on if you wish to hear special music when various events occur.

City Spell Events should be on if you wish to be notified when city enchantment spells are cast on your cities or those of other players.

Overland Spell Events should be on if you wish to be notified when overland enchantment spells are cast on your cities or those of other players.

Summoning Events should be on if you wish to be notified when summoning spells are cast.

End of Turn Summary should be turned on if you wish to see a summary scroll at the end of each turn. The information contained in the summary is the same as that obtained by consulting with your Chancellor (see **Chancellor**).

Automatic Advice should be turned on if you wish the computer to supply you with suggestions on what you should be doing during your game. Experienced players can turn this option off.

Random Events should be turned on if you wish random events to be part of your game (see **Events**).

End of Turn Wait should be on if you wish to be prompted to press the *next turn button* once all your units have moved.

Strategic Combat Only should be on if you wish *all* battles to take place under the computer's control. Turn this off if you wish to conduct your own tactical combat. Note: with this option on you need never witness combat at all; you are simply informed of the results.

Additional Unit Information should be on if you wish to keep an extra *combat unit display window* open during combat. This window provides information on remaining ammunition, mana and health of the active unit (see **Combat**).

Enemy Moves should be turned on if you wish to view the movements of enemy troops that are within your range of sight.

Enemy Spells should be turned on if you wish to be informed when other wizards cast spells.

Spell Book Ordering should be turned on if you wish to have the spells in your spell books arranged in sections by spell categories (i.e., city enchantments, creature summonings, etc.) rather than by color (life, death, chaos, nature or sorcery).

Spell Animations should be turned on if you wish to view the animations that apply to any spells that you have successfully cast.

Show Node Owners should be turned on if you wish to see the magic aura around controlled magic nodes. The magic aura is the same color as the banner of the controlling wizard.

Expanding Help should be turned on if you wish to view help information (obtained by right-clicking on areas) as a graphic that expands/emanates from the area in question.

Click on the *OK button* when you are finished adjusting the game settings to return to the *game options screen*.

QUIT

You can quit to DOS from the *game options screen* by clicking on the *quit button* at the bottom of the screen.
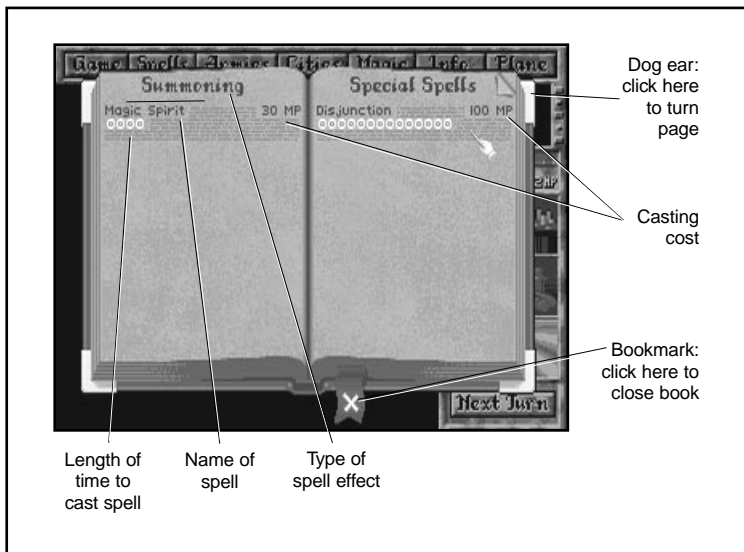
OK

If you simply wish to return to the game from the *game options screen*, click on the *OK button*.

Spells

licking on the *spells button* takes you to your spellbook. Only those spells that you know *and* that can be cast overland (i.e., noncombat spells such as city enchantments, unit enchantments, summoning spells, etc.) are visible. At the beginning of the game, the only spell in your spellbook is likely to be magic spirit, a common arcane summoning spell described in the **Spellbook** supplement.

The casting cost of a spell is shown to the right of the spell's name in your spellbook.

Dog ear: click here to turn page

Casting cost

Bookmark: click here to close book

Length of time to cast spell

Name of spell

Type of spell effect

The length of time (in turns) it takes to cast a spell is indicated underneath the spell's name by the number of colored symbols (spells that can be instantaneously cast show "Instant" instead of symbols). For example, if you wish to cast a specific nature spell and there are four green tree symbols beneath the spell's name, then it takes an estimated four turns to cast the spell (the actual time may vary if the amount of mana being spent per turn for spell casting is altered).

To turn to another page of your spell book, click on the dog-eared upper corners. To close the spell book without casting a spell, click on the red bookmark at the bottom of the book.

To cast a spell, click on the name of the spell. To change the spell you are casting, click on the new desired spell. Note that when you change spells, any magic power you have already invested into casting the original spell gets transferred to the new spell; any invested magic power that is "left over" after this transfer (i.e., the new spell has a lower casting cost than the original spell) is permanently lost.

You may simply stop casting the current spell (indicated in glowing letters) by clicking on that spell; you are then asked to confirm that you wish to cancel the spell.

For more information on different types of spells and spell casting, see the **Spellbook** supplement.

Armies

licking on the *armies button* takes you to the *armies screen.* This screen provides a complete list of all your armies and heroes and gives you access to the *items screen.* You can move through the army list quickly by using the arrow buttons that are located on either side of the list. Units that are *stacked* in the same map square are grouped together on the *armies screen.*
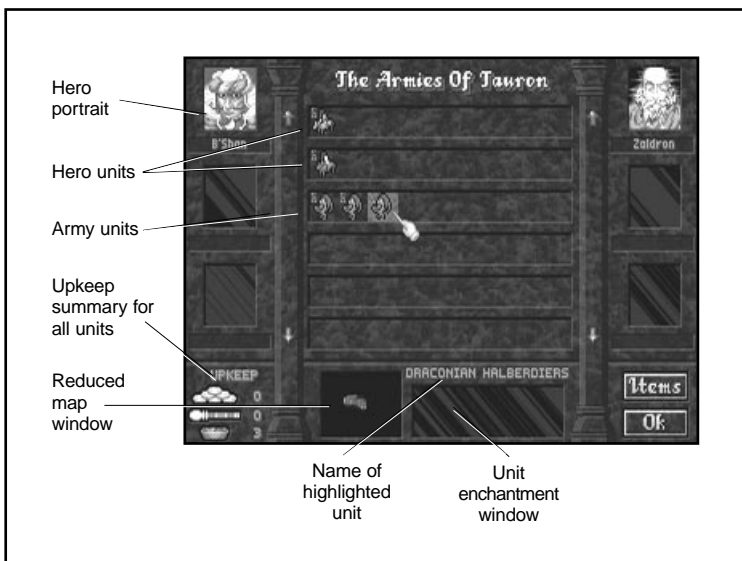
Clicking on such a group of stacked units takes you directly to the map square which the group is occupying.

Placing your mouse cursor over a unit on the list highlights that unit and causes the following:

- All current enchantments on the highlighted unit are listed in the *unit enchantment window* underneath the army list.
- The location of the highlighted unit is shown as a blinking white dot in the *reduced map window* underneath the army list. Enemy troops and cities are shown in this *reduced map window* as dots in the color of the controlling wizard.

- Right-clicking on the highlighted unit presents a detailed description of the unit (see **Basic Units Information**). You can dismiss the unit from your army by clicking on the *dismiss button*. You can also remove any enchantments that were cast by your wizard from the unit by clicking on the enchantment icon.
- Clicking on the highlighted unit activates it and finds the unit for you by taking you to the map square it is occupying in the *main movement screen*.

In the bottom-left corner of the *armies screen* is the *upkeep window*. This displays how much total gold, mana and food is required each turn to maintain your armies. Most armies and enchantments require some sort of maintenance cost. The *upkeep window* is a way for your wizard to conveniently examine and readjust the numbers of armies (by dismissal) and enchantments (by removal) so that any upkeep costs can be adjusted to reasonable values.

Clicking on the *OK button* returns you to the *main movement screen* at the same position you were when you entered the *armies screen*.

ITEMS

Clicking on the *items button* takes you to the *items screen*.

The *items screen* allows you to view, move and destroy artifacts that are currently being used by your heroes or in storage in your *fortress vault* (a holding area for unassigned items).
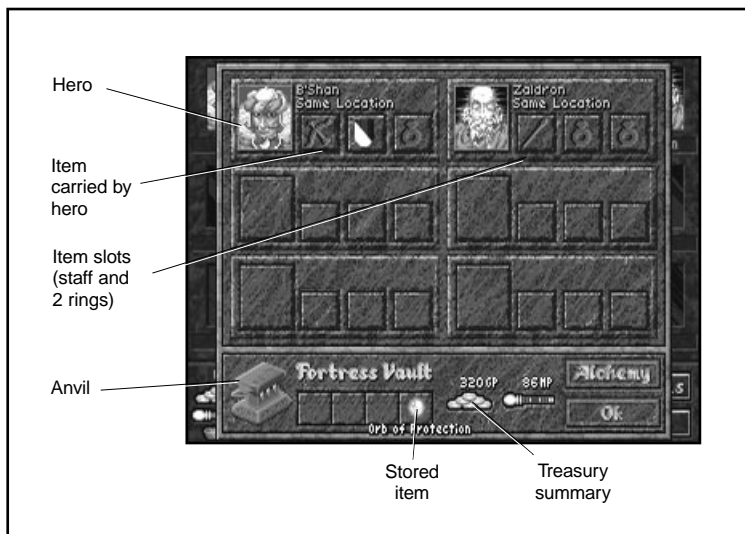
The *items screen* displays the artifacts that each of your heroes is currently using in a series of slots next to the hero's portrait. Each hero can carry up to three items: a weapon, a special item (such as a magic orb) and a piece of armor or a second special item. Up to four additional artifacts may be stored in the fortress vault (indicated by four slots in the lower left window of the *items screen*).

IMPORTANT: The three slots next to each hero's portrait are limited to holding specific types of items. Some slots can only hold special items (such as rings and orbs), while others are suited to holding armor (mail and shields). Below is a chart of the slots and the sorts of items they can hold. Note that the weapons and armor a hero can be equipped with depend on the hero's type; some heroes are mages, others are warriors, etc.

Slot For Artifact	Artifacts Allowed
Sword Icon	Axe, Mace or Sword
Bow Icon	Axe, Bow, Mace or Sword
Staff Icon	Staff or Wand
Staff crossed with Sword Icon	All Weapons
Armor Icon	Any type of Mail/Armor, Shields
Ring Icon	All Miscellaneous Items

Right-clicking on any item in the screen displays a list of attribute enhancements the equipped item provides.

Clicking on an item allows you to *pick up* an item (the mouse cursor now looks like the item). The item can then be *moved* to another hero (by clicking on the appropriate slot next to the recipient) or to the fortress vault.

If moving the artifact does not require moving it to a new map square (indicated by the phrase "Same Location" in light blue below the names of those heroes occupying the same map square as the current owner of the item), the move costs nothing.

If transferring the artifact requires moving it to a new map square (indicated by the phrase "Item Teleport" in red below the name of the planned recipient), attempting to do so calls up an *item teleport window*. You are asked if you wish to pay the required twenty mana to move the item (you must have enough mana to move the artifact).

Clicking on the *yes button* removes twenty mana from your mana reserves and moves the item to the requested location. If you click on the *no button*, you are returned to the *items screen*.

If you obtain too many artifacts to store or divide among your heroes, you may *break* extra artifacts by picking them up and clicking them on the anvil in the lower left corner of the *items screen*. Breaking an artifact over the anvil adds one half the base creation cost of the artifact in mana to your mana reserve (see **Artifacts**).

In addition to providing ways to view, move and break artifacts, the *items screen* allows you to examine heroes (by right-clicking on their portraits, see **Basic Unit Information**) and to move to the specific location of a hero (by clicking on his or her portrait) on the *main movement screen.*

If you are short of either mana or gold, you can use the *alchemy button* in the *items screen* to interconvert these two goods. Click on the *alchemy button* to get to the *conversion screen*. See **Alchemy** for more information.

Clicking on the *OK button* returns you to the *armies screen*.

Cities

C licking on the *cities button* takes you to the *cities screen*. This screen provides a list of all your cities, including specific information on each city's production and current enchantments. This screen also provides a way to alter the structures or troops being built by a city.

City summaries

Treasury summary

City enchantment window (no enchantments)

Reduced map window
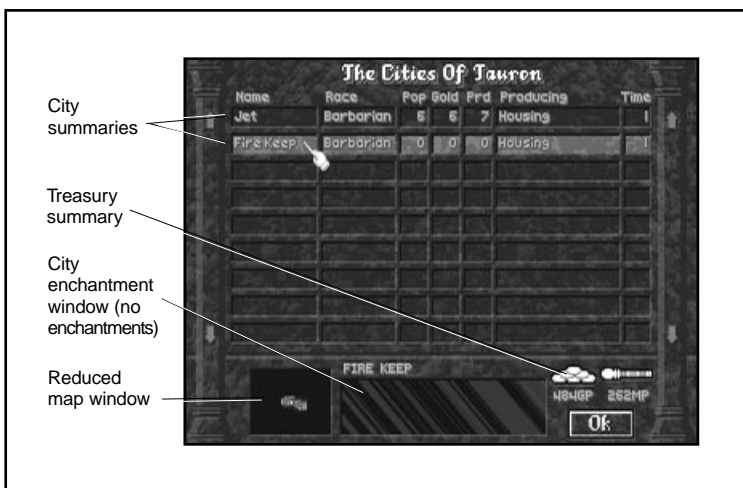
The listing of cities forms the largest part of the *cities screen*. You can scroll through the list by clicking on the arrow buttons on either side. The information provided on each city includes the city's name, the race of the occupants, the population size, gold production per turn, production points per turn, the structure or troops currently being built and the length of time to complete the current project.

You can highlight a city by placing the mouse cursor over the city's line on the list. Any enchantments on the highlighted city appear in the *city enchantment window* under the list. The location of the highlighted city appears as a blinking white dot in the *reduced map window* under the list. The locations of other cities appear as colored dots in the *reduced map window*, where the color of each dot is that of its controlling wizard.

Clicking on the highlighted city takes you to that city's *city screen* (see **The Hamlet and the City Screen**). Right-clicking on the highlighted city calls up just that city's *production screen* (see **Production Screen**) in which you can alter the city's current project without leaving the *city screen*.

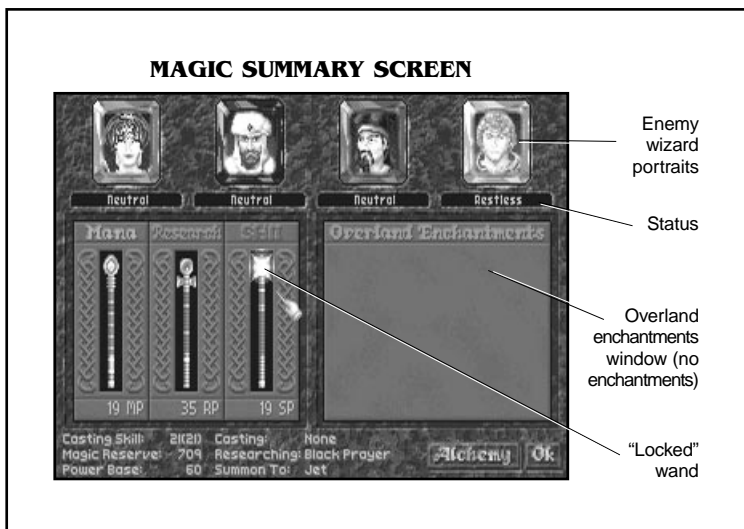Click on the *OK button* to exit the *cities screen*.

Magic

C licking on the *magic button* takes you to the *magic summary screen*. This screen contains portraits of all known enemy wizards (there are no faces in the frames at the beginning of the game, but don't worry, your opponents eventually introduce themselves), a list of overland enchantments, information on your magic power base, current spells you are researching or casting and how your available magic power is divided between researching, reserves and spell casting skill. The *magic summary screen* also provides a means to communicate with other wizards, to obtain information about other wizards, to adjust how your magic power is being allocated and to use alchemy to interconvert gold and magic power.

ENEMY WIZARDS

Across the top of the *magic summary screen* are a series of mirrors (or gems). At the beginning of the game the mirrors are empty, but as you meet other wizards, their portraits occupy these mirrors. You can use these mirrors for a number of purposes:

- Quickly determine the *banner color* of an opposing wizard. The wizards' faces are rimmed by the color of their banner type.
- Determine the *status* of your relationship with a wizard. Below the wizards' faces, phrases like "neutral" or "hate" summarize the current status of your relationship with a particular wizard.
- Obtain *information* about an enemy wizard by right-clicking on his or her portrait. Doing this calls up a detailed character sheet for that wizard; see **Enemy Wizard Statistics**.
- *Communicate* with an enemy wizard by clicking on his or her portrait. This calls up the *communication screen* from which you can form or break treaties, exchange spells and take other diplomatic actions. For more information, see **The Art of Diplomacy**.

MAGIC SUMMARY SCREEN

Enemy wizard portraits

Status

Overland enchantments window (no enchantments)

"Locked" wand

- Observe the status of wizards' relationships with each other. To the right of each wizard's portrait you may see a series of icons including scrolls, doves and crossed swords. These icons are color-coded to match the banner colors of the other wizards, including yours. A scroll icon indicates that there is a wizard pact or alliance in effect between the wizard in the portrait and the wizard whose banner color matches the ribbon on the icon. Similarly, the crossed swords icon indicates a state of war exists, while a peace symbol icon indicates a peace treaty is currently in effect. If no icon appears, those rivals are in a neutral state (i.e., not at war, nor under the terms of a formal peace treaty, wizard pact or alliance). See **The Art of Diplomacy** for more details.

MAGIC SUMMARY

The left side of the *magic summary screen* contains important information on how your magic power is being used. Basic magic information for your wizard is listed:

- **Spell casting skill** is the amount of mana per turn that you can channel into casting overland spells. It is also the amount of mana you can cast during one battle. Fledgling wizards start with a spell casting skill of five unless they are also Archmages (see **Special Abilities**), in which case they start with a spell casting skill of fifteen. Note that if a wizard has a hero with spell casting skill residing in his or her enchanted fortress, half of that hero's spell casting skill contributes to the wizard's overland casting ability (see **Casting Overland**). Channeling heroes have no affect on a wizard's combat casting. A hero's contribution to this skill is

indicated by a second number in parentheses following the spell casting skill. This second number is the total current spell casting skill of the wizard, taking any heroes' contributions into account.

- **Magic reserves** is the amount of total mana you have on hand for casting spells. You can make more efficient use of this mana if your wizard has the Mana Focusing ability (see **Special Abilities**).
- **Power base** is basically the amount of magic power or mana you are drawing in from all sources (magic nodes, religious institutions, special resources and wizard guilds) per turn.
- **Casting** shows the spell, if any, you are currently casting.
- **Researching** shows the spell you are currently researching.
- **Summon to** shows the city where your summoned magic creatures appear.

Above this basic magic information are *three wands* which can adjust how much of your total magic power you allocate to your mana reserves, researching efforts and spell casting skill. Each wand is appropriately labeled and the amount of magic power being devoted to each area (after adjustments for any special abilities, research points accumulated from institutions of higher learning, etc. have been made) is indicated underneath the wands. To adjust the ratio of magic power being allocated to an area, click and drag the "colored liquid" inside the wand to the desired level. The other wands simultaneously readjust their levels. To hold the percent (ratio) of magic power being devoted to a particular area constant, click on the head of that wand (the crystal glows bright to symbolize that its ratio bar is "locked") before adjusting the levels in the remaining two wands. Click on the head a second time to unlock the wand's ratio bar.

OVERLAND ENCHANTMENTS

This section of the *magic summary screen* shows any global enchantments currently in effect. The enchantments are shown in the banner-color of the casting wizard, except for enchantments cast by your wizard, which are listed in dark print.

To *remove* one of your wizard's global enchantments (in dark letters), click on the spell in *the overland enchantment window*. This also ends any maintenance you were paying for that spell.

If you wish to *dispel* global enchantments that were cast by other wizards, you must cast (by clicking on the *spells button* in the *main movement screen* and then clicking on the appropriate spell in your spell book; see **Spell Casting**) disjunction, disjunction true or spell binding. After casting one of these spells, you can choose which global enchantment you wish to eliminate.

Right-clicking on a global enchantment calls up its description.

ALCHEMY

If you are short of mana or gold, you can interconvert these two resources through the use of alchemy. Click on the *alchemy button* to get to the *conversion screen*.
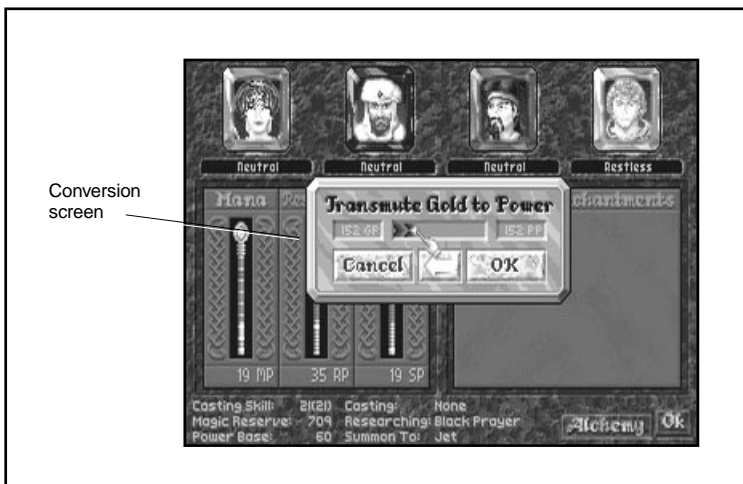
Conversion screen

Do not, however, recklessly interconvert gold and mana. Unless your wizard has the special ability of Alchemy (see **Special Abilities**), all such conversions result in a loss of half the starting material! That is, if you convert 100 gold into magic power, you obtain only 50 mana points.

Click on the arrow button between *OK* and *cancel* until the direction of the conversion (gold to magic power or magic power to gold) suits your purposes. Then click and drag the black and gray arrow in the center of the window until the amount of mana or gold you are converting (called *transmuting*) is correct. Let go of the mouse button and click on the *OK button* to make the conversion. Click on the *cancel button* to return to the *magic summary screen* if you change your mind. Note that there is also an *alchemy button* in the *items screen* (see **Armies**). If you entered the *conversion screen* from the *items screen,* you return to the *items screen* upon exiting.

When you have finished with the *magic summary screen,* you may exit by clicking on the *OK button.*

Info

C licking on the *info button* calls up a list of advisors (surveyor, cartographer, apprentice, historian, astrologer, chancellor, tax collector, grand vizier) who can provide valuable information to your wizard.


SURVEYOR

Clicking on the *surveyor button* replaces the *status window* of the *main movement screen* (see **Status Window**) with surveyor information (*surveyor window*). By running the mouse cursor over visible map squares on the *main movement screen,* you can see information about the map squares revealed in the *surveyor window*.

The surveyor's information includes statistics for a potential city built on the selected map square: the potential maximum population of a city built at that site and any bonuses such a city would get to its production and gold revenue because of nearby terrain features.

The information displayed in the *surveyor window* also includes the terrain type and any special terrain features (minerals, crystals, wild game, etc.), including their bonus effects on food, gold, power and production. See **Terrain Types** and **Terrain Specials** for more information on specific terrain types and features.

Click on the *cancel button* at the bottom of the *surveyor window* to exit.

Surveyor summary of effects for indicated square
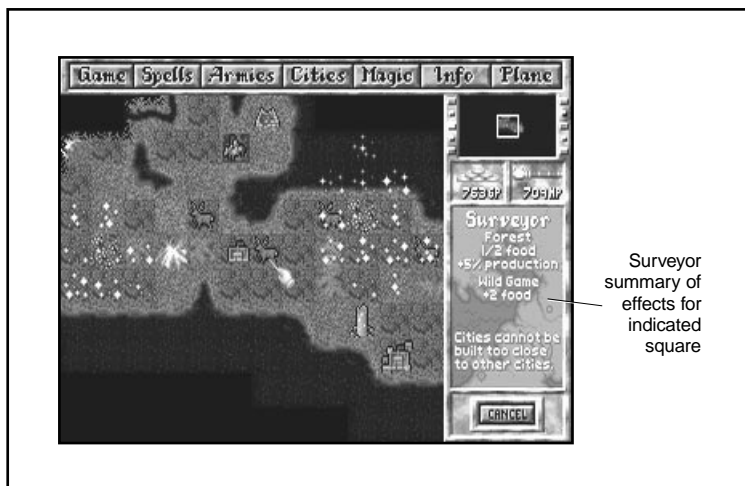
CARTOGRAPHER

Clicking on the *cartographer button* brings up maps of Arcanus and Myrror (you can switch between the two maps by clicking on the dog ear in the lower right corner). These maps only show those areas of the worlds that you have already explored.

The information displayed on the maps includes known cities (the color of cities matches the banner-color of the controlling wizard), military units and other structures (towers, temples, ancient ruins, etc.). To the right of the map is a key which shows the banner-colors of all known wizards.

World

Explored area

City flags (colors indicate owners)

List of known wizards

Dog ear
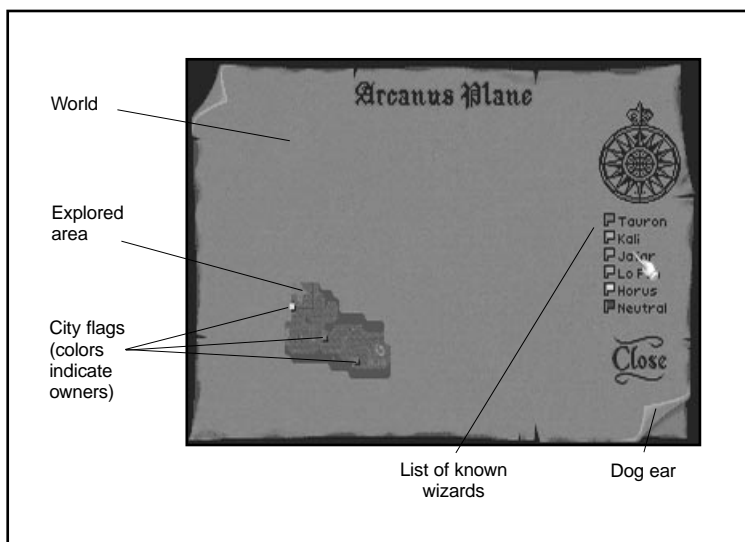
Clicking on a part of the map returns you to the *main movement screen*, with the *main movement window* centered on that location.

Clicking on the word "close" returns you to the *main movement screen*.

APPRENTICE

Clicking on the *apprentice button* takes you to your complete spell library. All the spells that you have already researched are legible in this book. All of the spells that you will *eventually* be able to research appear in a runic script.

Spell category

Potential spells

Known spells

Bookmark: click to exit
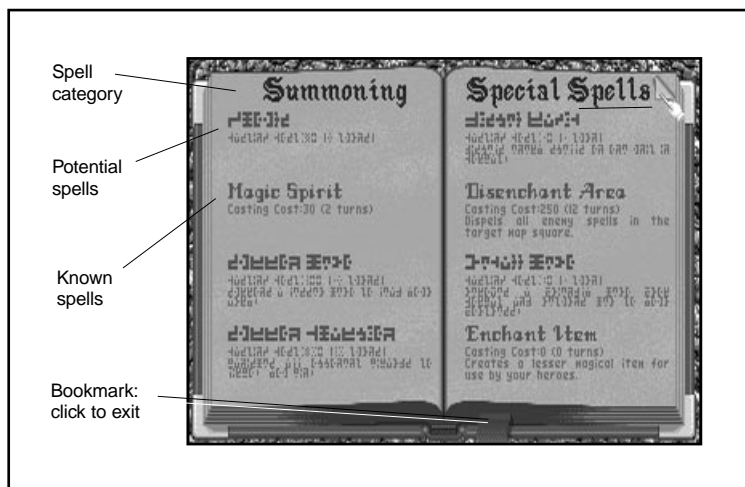
Spells in the apprentice's spellbook are divided into categories: summoning spells, special spells, city spells, enchantments, unit spells, combat spells and research spells. The research spells are those that you can learn at this time. The spells that you are currently researching and casting appear in glowing letters.

To turn the pages of the apprentice's spellbook, click on the dog ears in the upper corners of the pages. Click on the bookmark to exit.

HISTORIAN

Clicking on the *historian button* takes you to a graph called History of Wizards' Power. This graph shows all known wizards' power over time. The power of a wizard is the combined value of many things including army strength, total magic power drawn from all sources per turn, and spells that wizard has learned.
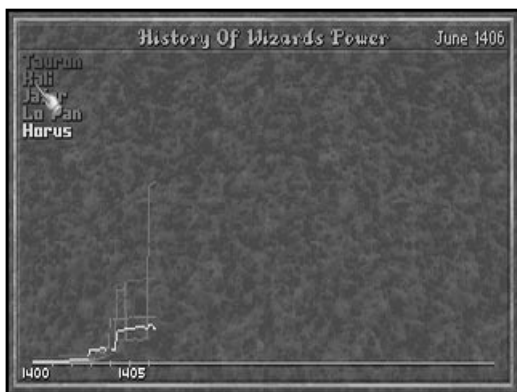
The History of Wizards' Power graph also compares your wizard with all known enemy wizards. Each wizard's power is represented by a colored line corresponding to the wizard's banner-color. A key in the upper left corner shows each wizard's name printed in the same color.

Click anywhere on the graph to exit this screen.

ASTROLOGER

Clicking on the *astrologer button* takes you to the *current status screen*. This screen shows a comparison of your wizard with all known enemy wizards.

The *current status screen* is divided into three sections: Army Strength, Magic Power and Spell Research. The sections each have a bar graph that compares all known wizards in terms of the relative strength of their armies, the total magic power drawn per turn, or the total research cost of all the spells learned by each wizard to date. The wizards are each represented by banner-colored bars next to their names, where the relative lengths of the bars reflects the relative "power" of each wizard.

Click anywhere on the screen to exit.

CHANCELLOR

Clicking on the *chancellor button* unrolls a scroll that lists the events that occurred during the *previous* game turn.

Click anywhere on the screen to exit.
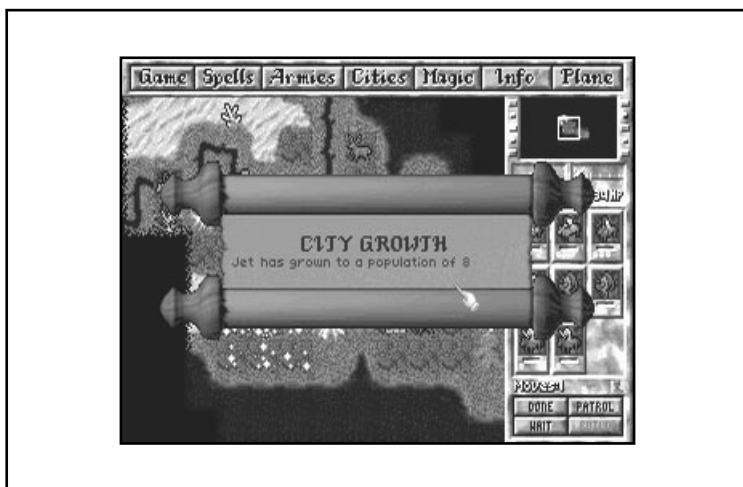
TAX COLLECTOR

Clicking on the *tax collector button* takes you to the *tax window* in which you can set the taxes for the people in the cities you control.

Tax rates can be set in increments of one-half gold coin per townsperson. Tax rates at the beginning of the game are set at one gold piece per townsperson. Elevating taxes increases gold revenues, but decreases productivity by increasing the level of unrest in a city. Decreasing taxes has the opposite effect (see **Gold**).

If you wish to set a new tax rate, click on the desired rate. If you decide not to change the current tax rate, click anywhere else (outside of the *tax window*) on the screen. Both options takes you back to the *main movement screen*.

GRAND VIZIER

Clicking on the *grand vizier button* takes you to a window in which you can select or deselect computer-controlled production of buildings in your cities. This function is automatically on if you are playing at the Intro setting and off if you are playing at Average or harder settings. At the Easy setting, you receive a prompt at the beginning of the game asking if you wish to use the grand vizier to control what your cities are building.

If the grand vizier is on, you do not receive prompts when your cities complete projects. If you wish to examine what your cities are producing or if you wish to change what they are making, you can enter the *cities screen* (click on the *cities button* in the *main movement screen*) and right-click on any city whose production you wish to change. See **Cities** and **Production Screen** for more details.

MIRROR

Clicking on the *mirror button* takes you to your *mirror screen*. This screen contains all sorts of relevant information about yourself (and is almost identical in set up to the *enemy wizard statistics screen* that reveals information about your foes; see **Enemy Wizard Statistics**).

The mirror shows all of your spell ranks (as spell books), special abilities, total gold reserve, total mana reserve, your fame and a list of all your heroes (including their class and level).

Exit the *mirror screen* by clicking.

Fame

A wizard's fame influences how readily mercenary troops (see **Mercenaries and Heroes**) approach a wizard. As your fame grows, you pay less gold per turn to maintain your total number of troops. In addition, your rising reputation tends to draw more experienced mercenaries than it did before. Mercenaries who approach you may ask for a lower initial payment to join your cause (though they always ask for something).

Wizards start with very little fame unless they have chosen to be Famous, in which case they start with 15 fame points (see **Special Abilities**).

Fame is slowly accumulated through conquest (of neutral or enemy cities), establishing new cities, and the recruitment of Legendary heroes (see **Special Unit Abilities**). For each new city that he builds, a wizard earns one fame point. For conquering hamlets, villages, towns, cities and capitals, a wizard earns 0, 0, 1, 2, and 3 fame points, respectively.

Plane

licking on the *plane button* shifts you between *main movement views* in Arcanus and Myrror. Currently-active units that can shift between planes (because of their location in a tower of wizardry or city with an astral gate, or because of a special ability) move between Arcanus and Myrror each time you click the *plane button.*

Status Window

he *status window* on the right side of the *main movement screen* displays your total gold reserve and total mana reserve.

Upkeep Summary Window

ppearing underneath the *status window* on the right side of the *main movement screen* is an area called the *upkeep summary window*. Most of the time this window contains information on the net gain or loss of gold, food and magic power per turn.

Because maintaining units and enchantments and casting spells requires gold, food and magic power, it is important to pay attention to what is happening in this window. If at any time, you are *losing* gold, food or mana every turn, the number in the *upkeep summary window* turns red. If there is not enough food to maintain troops, they start dying off! A running deficit of gold or mana, however, does not generally result in an immediate loss of units or enchantments. Instead, gold and mana are taken from your treasury (total gold reserve) and your total mana reserve, respectively. Once these reserves are depleted, units and enchantments can no longer be maintained. *Then* they start disappearing.

BASIC UPKEEP INFORMATION

Upkeep Type	Notes
Gold	To pay normal troops and non-noble heroes (maintenance cost reduced by wizard's fame); To maintain buildings
Food	To maintain normal troops (1 food per unit)
Mana	To maintain the presence of summoned creatures; To maintain enchantments and continuous spells

If you are not generating a sufficient amount of food to maintain your troops, you may go to one of your city screens and adjust the number of farmers and workers so that you are producing enough food (see **Food**).

If you need more gold to maintain your troops and buildings, you have many options: you can increase your tax rate (see **Tax Collector**); construct buildings that increase city revenues (marketplace, bank or merchant's guild); conquer neighboring cities or build new ones to increase your base productivity; convert mana into gold through alchemy, sell buildings, and dismiss extra troops or expensive heroes.

If you need more mana to maintain your enchantments and summoned creatures, you also have several options: you can alter how much of your total magic power per turn gets funneled into your mana reserves (see **Magic**); summon magic spirits or guardian spirits to meld with new magic nodes; construct buildings that produce magic power (shrine, temple, parthenon, cathedral or wizard's guild); conquer nearby towns or build new cities to increase your potential magic power base; convert gold into mana through alchemy; destroy magic artifacts to release mana; dismiss summoned creatures, and remove expensive enchantments.

Main Movement Screen

he *main movement screen* is where you may move units for exploration and other purposes, view cities and surrounding terrain and keep an eye on previously discovered enemy cities and enemy troop movements.

The *main movement view* is the large map on the *main movement screen* and can be scrolled by right-clicking on map squares. The *main movement view* adjusts so that the map square you chose is centered in the window.

QUICK INTRODUCTION TO GETTING AROUND THE MAP

Right-clicking on *cities* on the map calls up their *city screens* (see **The Hamlet and City Screen**). If the city is enemy owned or neutral, you cannot examine the *city production screen*. However, you can determine the race occupying the city, the city's production, and the troops garrisoned there, as well as which buildings have been constructed.

Right-clicking on your own cities also calls up their *city screens.* From there, you can quickly determine the city's productivity and the nature of its latest project. You may activate patrolling units on city squares from this screen (by clicking on them). You may also enter the *city production screen* by clicking on the *change button* below the city's current building project.

On the *main movement screen,* you may choose the destination of active units (outlined in red) that you control by clicking on the destination map square. You may activate inactive units by right-clicking on them; then click on the individual units appearing in the *unit window* so that their backgrounds fill in with color (see the following section). If you have an active unit, hitting the Ⓒ key on your keyboard centers the *main movement view* on that unit.

Right-clicking on stacks of enemy units calls up a *unit list window* which briefly describes all of the units in the stack.

More details on what can be done from the *main movement screen* follow in the next section.

UNIT ACTIONS

When units are first built (by cities), summoned or hired, they appear as *active* (outlined in red) units. Summoned units appear on the map square of the wizard's city that has his or her summoning circle. Hired units (including heroes) appear on the map square of the wizard's enchanted fortress. Finally, units that were constructed within one of the wizard's cities appear on the map square of the city in which they were built.

All active units may do one of the following (most options appear in the *unit window* on the right side of the *main movement screen*):

Active unit (stack)

Individual units

Movement options
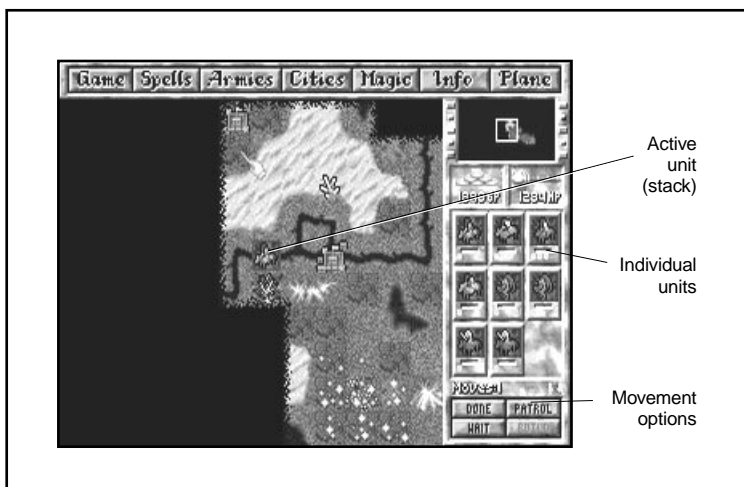
- **Move** by clicking on an allowed destination map square or by hitting the keys on the numeric keypad. When units are moving over long distances, a "G" appears on their pictures. Right-clicking on a unit or stack that is traveling over a long distance reveals, with tiny boot symbols, the exact path over which it is traveling.
- **Pass** or decide not to move for a turn by clicking on the *done button* (the unit may be reactivated by right-clicking on it);
- **Wait** until other units have moved or other actions have been performed before deciding what to do (by clicking on the *wait button*);
- **Patrol** by clicking on the *patrol button*. Active units set to patrol remain in the current map square. While patrolling, units have an intrinsically higher Scouting ability (see **Special Unit Abilities**) which allows them to see one map square farther away than normal (usually, while active, only the best Scouting ability of all units in a stack is operative). Note that most units have an intrinsic Scouting ability to see one map square away and flying units can normally see two squares away; patrolling extends these scouting ranges to two and three, respectively. Patrolling units appear grayish and only become active again if you right-click on them to open up the *unit window* and then click on the unit you wish to activate.

Some units can perform special activities:

- **Build roads**: Engineers can build roads (click on *build button*). After selecting this option, click on the destination square for the road which you are building. A direct path is plotted (and a road built along this path) from the map square the engineers currently occupy to the destination square. To change the destination square while building a road, activate the engineers and click on a new target map square after hitting the *build button*. *Roads are allowed to cross rivers but not oceans.* Finally, roads require from two to six turns per square to complete, depending on the terrain type (see **Building Roads**). Multiple engineers working on the same road speed up this process. Engineers that are busy constructing roads show an "R" on their pictures.
- **Purify**: Priests and shamans can purify corrupted land (click on *purify button*), a process that takes ten unit-turns (for example, 2 priests could purify a square of corrupted land in 5 turns).
- **Meld:** magic spirits and guardian spirits can meld with nodes (click on *meld button*), sacrificing themselves to provide a channel that draws the magic power from the node and sends it to the controlling wizard. Nodes can be stolen from enemy wizards in this way as well. Note, however, that a node that was taken by a guardian spirit can only be stolen 25% of the time; the rest of the time, the spirit that is attempting to meld with the node dies.
- **Build** outposts: settlers can build outposts (click on *build button*) on map squares that are at least three map squares from any other city.

Unit Movement

Every game turn, you cycle through all active units (only patrolling units must be specifically activated). The map window centers on the active unit (outlined in red) and a *unit window* appears on the right side of the screen (in place of the *upkeep summary window*). You can center the map on the currently active unit by hitting C on your keyboard.

If you simply wish to move the active unit, you can click on an allowed destination square (a destination is allowed if a valid path can be found). If the destination is too far away to reach in one turn, the unit "remembers" where it is supposed to go. On subsequent turns, the unit continues to make its way to the destination square.

Note that you can examine a unit's path by right-clicking on it after it has completed its movement for the game turn. You can then change the unit's destination or path by clicking on new map squares. On the following turn, the unit (or stack) follows its new path.
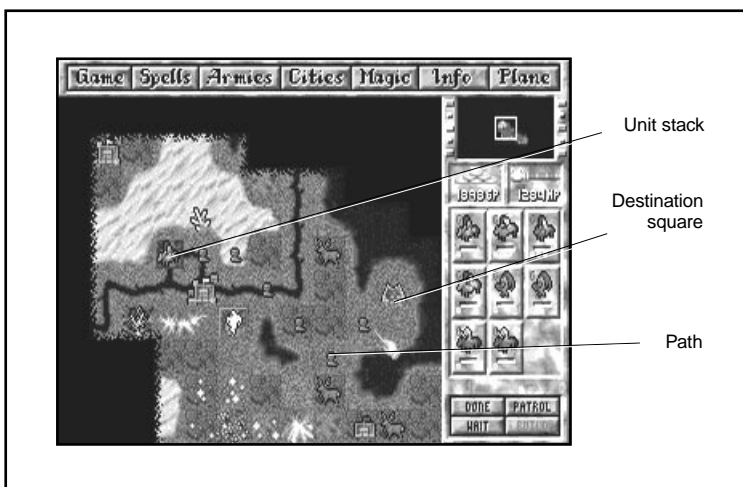
Also note that a unit stops moving when its preset path would cause it to enter a map square occupied by an enemy city or unit. This allows you to decide whether you wish to alter your path, or stop and engage in combat by entering an enemy city or a square occupied by enemy troops.

Upon reaching the destination, if the unit (or stack) has any movement points left, it appears as one of that game turn's active units (with the remaining movement points left to allocate). If the unit has no movement points left, it becomes active again during the following turn.

If you wish to do something other than move an active unit, click on the appropriate button in the *unit window*.

Note that units can move in stacks of up to nine units. When they move in stacks, the unit with fewest and most limited movement points governs how far and over what terrain the entire stack can move (see **Movement Modes**).

If you wish to split a stack into smaller stacks (of one or more units), click on the individual unit pictures in the *unit window* until all the units you wish to move as one stack are highlighted and all the units you wish to leave out of the current stack are grayed out. Move the stack of highlighted units. Repeat this process for the units that you left behind by right-clicking on the remaining stack to activate it and proceeding from there (either splitting the remaining stack or moving the remaining stack as one).

You may also split a stack by waiting until the stack has stopped moving. Then right-click on the stack and all units with movement points left become activated. These units can then be moved away from the remaining units. This is a fast way to split a stack into smaller stacks by the speed of the individual units.

Special Unit Movement: Sailing

Triremes, galleys, warships, air ships and floating islands can carry other units over oceans. These "sailing units" may only travel over ocean squares (of course, air ships can travel over land as well as sea). When sailing units are next to land, they act as de facto land squares for purposes of loading and unloading troops. That is, nonflying units can walk on or off sailing units adjacent to a land square.

When a sailing unit moves away from a land mass, it carries on board the nonflying units stacked with it. These nonflying units are automatically placed "on patrol" inside the ship. This means that when the ship pulls up alongside another land mass, the "patrolling" units on the ship do not automatically activate. Instead, to activate a unit that was carried by a ship, right-click on the ship to open the *unit window*. Then click on the units you wish to activate. You can move these now-active units onto land.

Note that, when leaving a port, a departing ship automatically takes a number of *patrolling* units corresponding to its carrying capacity with it, chosen at random. So, be careful when you pull a ship out of port (a city). You might want to wake up any patrolling units in the city's garrison that you want to keep there, so they do not accidentally set sail! One interesting point is that *heroes do not count toward the carrying capacity of a vessel* (feel free to add them to an already full ship, if you like).

World Window (Reduced Map)

he *reduced map* (*world window*) to the right of the *main movement screen* displays a smaller rendition of the world map. Any active unit appears as a small blinking white dot on this map.

Cities appear as colored dots (city color is that of the banner of the controlling wizard; neutral cities are brown).

The white square in the *reduced map* delineates the area currently in view in your *main movement screen*.

Clicking on an area in the *world window* centers the *main movement screen* on that location. This provides another convenient means to get "around" the world.

Unit Window

he *unit window* is extensively described earlier in **Unit Actions**. This window appears on the right side of the *main movement screen* whenever it is time for an active unit (stack) to move or when you right-click on a unit or stack in the *main movement view* or a *city screen*.

All units that appear together in the *unit window* are currently stacked (no more than nine units may be stacked together).

Grayed out units in the *unit window* are either patrolling or out of movement points for the turn.

Clicking on a unit in the *unit window* activates it.

Right-clicking on a unit displays the unit's statistics (see **Basic Unit Information**).

The *unit window* provides some unit information at a glance:

DAMAGE

A colored bar appears below units that have sustained (and not yet healed from) damage; an uncolored or "empty" bar is present when a unit is undamaged. A green bar indicates that the unit is still fairly healthy, but has injuries of up to 1/3 of its normal hit points. A yellow bar indicates that the unit has lost between 1/3 and 2/3 of its total hit points. *A red bar indicates that the unit is severely injured*, having fewer than 1/3 of its normal hit points left.

EXPERIENCE LEVEL REPRESENTATION

A series of circles of different colors and numbers are used to represent unit experience levels (see **Experience Levels**).

Rings: Number and Color	Experience Level of Normal Troops	Experience Level of Hero
1 Silver	Regulars	Myrmidon
2 Silver	Veterans	Captain
3 Silver	Elites	Commander
1 Gold	Ultra Elites	Champion
2 Gold	Champions	Lord
3 Gold	Not applicable	Grand Lord
1 Red	Not applicable	Super Hero
2 Red	Not applicable	Demi-God

WEAPON TYPES

If the unit is wielding certain magic weapons, this is represented by a small sword on the unit's picture. The sword is red for flame blades and eldritch blades, white for blessed and mithril weapons and purple for adamantium weapons.

MOVEMENT MODES

Different units are capable of moving in different ways and at different speeds. In the *unit window,* the bottom edge shows the number of movement points left to the unit (stack) as well as any special movement modes. See **Table C: Basic Movement Types** in the **Appendix**.

Planar Travel

Traveling between the planes (worlds) of Arcanus and Myrror can take place under the following circumstances:

- Units in a tower of wizardry can move between planes (click on the *plane button* in the *main movement screen*).
- Units in a city with an **astral gate** (life magic spell) can move between Arcanus and Myrror.
- The special unit ability Planar Travel allows certain units to travel back and forth between the two planes without regard to location. These units can only move between planes (when outside of towers of wizardry or cities with an **astral gate**) while stacked with other units if all the units in the stack have Planar Travel. The global enchantment **planar seal** negates this special ability.

Movement between planes occurs when you click on the *plane button* (*main movement screen*) if one of the above conditions holds true. Units capable of moving between planes (due to their location or a special ability) appear in both Arcanus and Myrror when you click on the *plane button*. Simply move them in the normal way (click on a destination map square) in whichever plane you prefer.

Teleporting Between Cities

It is possible for units to teleport between two cities if both cities have **earth gates** (nature magic spell). This teleportation costs one movement point for the unit. Teleportation is automatically used when you select a city with a friendly **earth gate** as the destination square (see **Unit's Actions and Movement**) for a unit stationed in another city with an **earth gate**.

Next Turn

Clicking on the *next turn button* in the bottom right corner of the *main movement screen* moves the game to the next time period (or turn). This button only appears when all units (except those on patrol) have been given orders.

If the End of Turn Wait setting (see **Settings**) is off, the *next turn button* never "pops" up. Instead, the game automatically advances to the next time period after all units have been allowed to act.

When you click the *next turn button,* or when the turn advances automatically, an End of Turn Summary appears if you have selected that option from the game settings (see **Settings**). At this time, gold, mana and resources are collected and allocated for construction and maintenance; damaged units heal, and movement points for all units are replenished.

Basic Exploration and the Hamlet
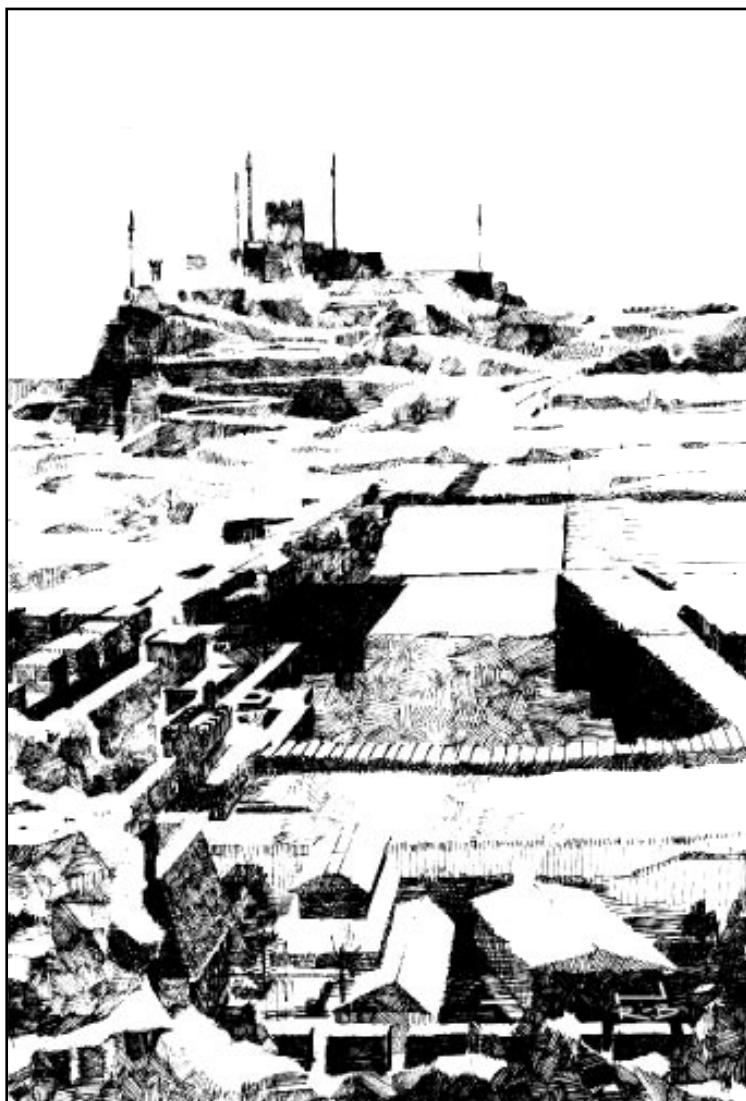
The following sections focus on the basic information necessary for you to expand your territories and build up your cities.

Exploring the Worlds of Arcanus and Myrror

W hile the worlds of Arcanus and Myrror are similar in many ways (each having some basic land masses, oceans and seas, creatures, magic sources and minerals), Myrror is a fantastic world with an almost-alien, mystical richness of creatures, magic and elements. There are creatures like flying fire-breathing draconians and delicate and mysterious dark elves, creatures the likes of which are rarely (if ever) seen on more-mundane Arcanus. The nodal magic sources on Myrror are twice as strong as those on Arcanus, while two of the rarest magic elements in the universe exist solely on Myrror: adamantium and crysx crystals.

All new wizards start on one of the two worlds. Until a wizard's troops have captured a tower of wizardry or (if a wizard is learned in life magic) until the wizard has learned to cast spells that allow planar travel, the wizard must stay on his or her home world.

Until your wizard can travel to a different plane, your exploration is limited to his or her home world. Exploration is a vital element in *Master of Magic*. It is only through exploration and expansion that you meet other wizards and develop an ever-increasing magic power base and knowledge of spells.

When you start the game, you see your hamlet (a small city) flying your colored banner. Only the smallest area around this hamlet is visible (you have to explore the rest).

City map window

City enchantment (none)

Garrison window (no troops)

Production window

Cityscape window

Resource window

Population row
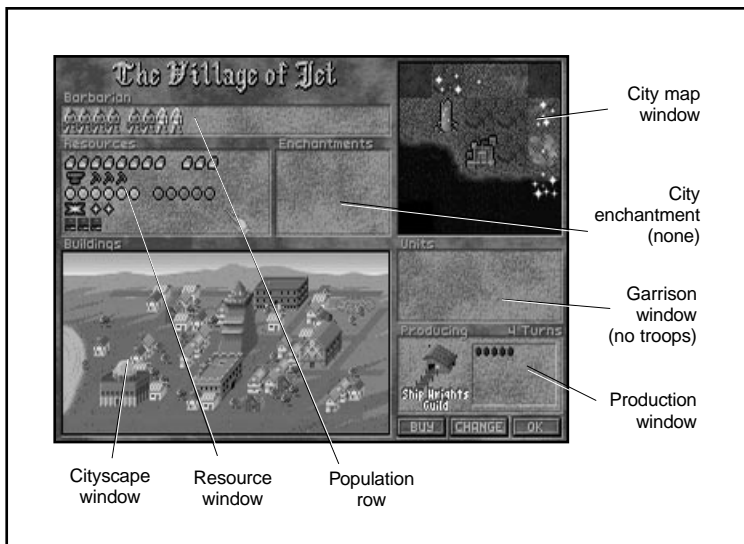
As you build troops, summon creatures and hire mercenaries, more and more of the world becomes visible and accessible to you. Moving troops into the black, uncharted reaches beyond your cities (see **Unit Actions**) reveals more of the surrounding lands. If you have some knowledge in nature magic, you may be able to get an early start on exploration by learning the spell ᴇᴀʀᴛʜ ʟᴏʀᴇ if it is in your spell library (see **Spellbook** supplement). This spell allows you to permanently view huge, unexplored areas of either world.

MAP SQUARES

Both worlds are divided into small sections called map squares. Each map square is characterized by a terrain type. Terrain types offer different potential resources in terms of total food production, gold and manufacturing (nonfood production). Each terrain type also has a certain chance of containing special resources (described in **Terrain Specials**). Finally, terrain can affect how quickly creatures and other units travel.

TERRAIN TYPES

Table D: Terrain Types in the **Appendix** lists the different terrain types on Arcanus and Myrror.

TERRAIN SPECIALS (MINERALS, BIOTA, NODES AND STRUCTURES)

Table E: Terrain Specials in the **Appendix** lists the special minerals, plants, animals, nodes and buildings that can be found on various terrain types and the effects of having these terrain specials in cities.

Building Roads

The rate at which engineers can build the terrain special "roads" depends on the terrain type. **Table F: Road Building** in the **Appendix** indicates how many game turns it takes a single engineer unit to build a road over different terrain types. More information on building roads can be found in **Unit Actions**.

WANDERING MONSTERS

Raiders and rampaging monsters may appear from time to time, exploring the worlds in the same manner as you probably are. Raiders are bent on capturing cities they find, while monsters are merely interested in destruction. The frequency with which these units appear and their strength depends on the difficulty setting of the game. When raiders take a city, it reverts to neutral control. When rampaging monsters win, there is a chance they trash a city so thoroughly that it becomes a ruin, and a lair to explore.

The Hamlet and the City Screen

he hamlet in which you begin the game is your first source of workers, settlers, gold, magic power and spell research points.

Your home base, as you first see it, looks like a small settlement with a waving flag. The flag is your wizard's banner-color, and all subsequent cities you conquer or build are marked with such a flag. Enemy cities display the controlling wizard's banner, while neutral cities fly a brown flag.

As cities increase in size (population), their appearance in the *main movement view* changes appropriately.

Right-click on the picture of your hamlet in the *main movement view* to bring up the *city screen*. This screen contains all of the important information about your city and the necessary tools to take it from a tiny hamlet to a thriving city.

CITY POPULATION

Across the top row of your hamlet are small figures representing the inhabitants. The inhabitants of the city are generally productive and either spend their days farming or working in some other capacity. The number of people who farm are shown on the left, while the workers are congregating on the right.

The minimum number of people necessary to produce enough food (by farming) to feed all the inhabitants of the city are automatically sectioned off on the left side of the population row. These farmers cannot be turned into workers; however, they do contribute to the production of the city (producing half as many production points as workers; see **Resources**). The rest of the population is composed of workers, who are automatically assigned non-farming jobs in order to keep productivity high.

The workers in the group on the right side of the population row may be turned into farmers (and farmers in this group may be turned back into workers) by clicking on a figure in this group. That figure changes type (from farmer to worker or worker to farmer), and all people to his or her left become farmers; all the townsfolk to the right become workers. The numbers of farmers and workers can be readjusted whenever necessary to keep productivity high while producing an adequate amount of surplus food to feed hungry troops.

On occasion, civil unrest may grow to the point that some of your workers rebel. *The rebels, shown in a group to the right of the productive workers, refuse to do any productive work*. However, they still manage to consume just as much food as they did before. You cannot change rebels into workers or farmers. You can only address the condition that spawned them to end their rebellious state.

CITY SIZE

Cities are named according to the number of inhabitants, as indicated on the following table.

City Name	**Population**
Hamlet	1–4
Village	5–8
Town	9–12
City	13–16
Capital	17–25

RESOURCES

The cities in *Master of Magic* can produce up to five different resources: food, production points, gold, magic power or "mana," and spell research points. These resources are represented in the *resource window* of the *city screen* as loaves of bread, pick axes, coins, stars and books, respectively. Larger quantities (10 units) of each resource are represented by sacks of flour, anvils, stacks of gold, large stars and open books, respectively. For example, two sacks of flour and three loaves of bread represent the production of 23 units of food by the city's farmers. Similarly, four stacks of gold and one gold coin represent the production of 41 gold pieces by the local townsfolk. The various resources are described in the following sections.

FOOD

Food is necessary to support both city residents and normal troops. Food comes from farmers (two food units per farmer) working the land around the city and from special institutions (granary and farmer's market). Certain things can modify the amount of food produced by the city's lands, such as famines and the presence of a forester's guild.

While every city automatically allocates enough farmers to feed the populace (if possible), it does not necessarily allocate enough farmers to produce the surplus food required to maintain normal troops. (A normal unit requires one unit of food per turn.) Keep an eye on the *upkeep summary window* on the right side of the *main movement screen*. Whenever the net food per turn drops below zero (negative numbers appear in red), you may wish to convert another citizen to a farmer in one of your cities to ensure that your troops are fed. If you neglect to take care of this immediately, units start dying!

In the *city screen*, the food row shows all food necessary to maintain the citizens to the left. Slightly separated from this food and to the right are the surplus food units which are used to maintain your troops.

Because food in excess of what is required to feed troops and citizens spoils quickly, your towns sell these goods and obtain one gold piece for every two surplus food units.

In addition to feeding townsfolk and troops, *potential* food production has an impact on the growth rate of the population. The greater the difference between the number of people in a town and the total number of people that can be fed in the city, the faster its growth rate. This growth rate is further modified by the type of race in the city (some races naturally reproduce more quickly than others; see **Select Race**) and various city enchantments.

Finally, the rate of food production can be increased by building an animist's guild. This building allows individual farmers to harvest 50% more food than normal; the total amount of food a city can produce, however, is not affected. An animist's guild, therefore, allows more of the town's citizens to focus on production instead of farming.

Starvation

When a city does not produce enough food to maintain its populace, townsfolk start dying. Every negative food noted on the *upkeep summary window* translates as a loss of one townsperson per 20 turns of famine. Famine in a town is indicated by the word 'starvation' in red letters at the top of its *city screen*.

PRODUCTION

A town's workers generate two production points apiece (except for dwarves and klackons, who produce three apiece) and are responsible for the bulk of a city's production (farmers produce half as many production points as workers). A city's production can be further modified by the race occupying the city, the surrounding lands (deserts, forests, hills and mountains increase productivity), city buildings (sawmills, forester's guilds), and various enchantments (such as cursed lands and Gaia's blessing).

A city's production points are used to construct buildings and troops (see **Buildings** and **Normal Units**).

GOLD

You obtain gold by taxing the citizens of your towns. Note that *all* productive citizens pay taxes. Taxes are set by the Tax Collector (click on the *info button* of the *main movement screen* and then on the *tax collector button*). Tax rates start at one gold piece per townsperson, but can range from zero to three gold pieces in increments of one half gold piece.

While the tax rate affects how much gold you are earning per turn, tax rates also affect the productivity of your workers. This is reflected in the level of unrest in your towns. Higher tax rates generate more dissatisfied townsfolk (rebels) at two times the tax rate, while certain institutions (shrines, temples, parthenons and cathedrals) and spells (Gaia's blessing and stream of life) decrease the level of unrest by decreasing the number of rebels. Furthermore, the wizard special abilities Divine Power and Infernal Power make local religious institutions more effective at decreasing unrest (see **Special Abilities** section). Note that certain spells (including cursed lands, pestilence, famine and evil presence) *increase* unrest levels.

In addition to tax rates, other things influence how much gold you earn. Cities built on rivers or oceans increase commerce and income (see **Terrain Types**). Institutions such as marketplaces, banks and merchant's guilds generate additional income (as a percentage of the collected taxes). Producing trade goods instead of buildings or troops provides a great deal of gold from trade (see **Production Screen**). Cities with some terrain specials (silver, gold or gems) generate a constant stream of extra income as well. Finally, roads that connect cities to one another provide additional income from trade.

Gold is necessary to maintain buildings and some troops. The amount of income per turn required to maintain the town's buildings is indicated in the gold row by the darkened coins to the right.

Gold in excess of that needed to maintain buildings goes first toward paying upkeep for your troops. Any remaining gold gets placed in your treasury (gold reserves).

MAGIC POWER

There are many ways for a wizard to obtain the magic power required to learn and cast powerful spells. Magic power can be drawn from nodes (discussed in the **Magic Power and Nodes** section), obtained as treasure when exploring creature lairs or after destroying enemy wizards, from breaking artifacts and from various city sources. City sources of magic power are listed below.

- **Races:** Some races (beastmen, dark elves, draconians and high elves) automatically generate magic power by virtue of their magical natures (see **Select Races**).
- **Institutions:** Fortresses, shrines, temples, parthenons, cathedrals, alchemist's guilds and wizard's guilds generate magic power (see **Buildings**).
- **Minerals:** Cities built near sources of mithril, adamantium, quork and crysx crystals obtain additional magic power from these resources every turn (see **Terrain Specials**).

RESEARCH POINTS

Beside magic power, there are specific research points that can be generated to contribute to learning new spells. Spell research points are generated by institutions of learning such as libraries, sage's guilds, universities, oracles and wizard's guilds.

CITYSCAPE AND URBAN RENEWAL

In the lower left section of the *city screen* is the *cityscape window*. This window contains a graphic representation of the city and its buildings. As you complete buildings or other structures, they appear in this area. To examine the contents of a city, run the mouse cursor over this window; the name of the structure appears.

By right-clicking on a building in this window you call up an information scroll about the structure.

To sell a building, you can click on it (you only receive half of its construction cost in gold). The only structures that you cannot sell are fortresses and summoning circles.

CITY ENCHANTMENTS AND CITY WALLS

The *city enchantment window* appears to the right of the *resources window*. Enchantments affecting your city appear in this square. The spells that you have cast appear in white letters, while those cast by enemy wizards appear in the color of the controlling wizard. Having nightshade as a resource in your city (see **Terrain Specials**) and a building that can make use of this resource (religious institutions, see **Buildings**), significantly increases a city's ability to resist enemy city enchantments.

To remove enchantments that you have cast on one of your cities (to eliminate their upkeep costs), click on the name of the spell in the *city enchantment window*.

Some specific city enchantments create magic walls around the city (wall of darkness and wall of fire; see **Spellbook** supplement). Only one magic wall can encircle a city at any one time; however, a city can have standard city walls (an option in the *production screen*; see **Buildings**) in addition to a magic wall. The Wall Crusher ability that some units have only applies to the standard city walls, not to magic ones (see **Special Unit Abilities**).

To dispel city enchantments that you have not cast, you must use the disenchant area or disenchant area true spells (see **Spellbook** supplement).

CITY VIEW WINDOW

In the upper right section of the *city screen* is a *city map window* showing the map squares that contribute to the city's production.

GARRISON WINDOW

Underneath the *city view window* is your garrison. A maximum of nine units may be garrisoned in a city at any one time. Any troops currently stationed in the city or on the city's map square appear in this window. To activate a unit in this window, click on the unit. Right-clicking on a unit in this window calls up the *unit statistics window* (see **Basic Unit Information**).

BUYING OR CHANGING PRODUCTION

In the lower right section of the *city screen* is the *production window*. The building, unit or other item you are currently producing is shown in this area, along with how many turns remain before the project is completed. The amount of production (in terms of production points) already invested in the project is graphically shown by gold coins in this window. The amount of production remaining before the project is completed is shown as darkened coins.

There are three buttons below the *production window*:

- **Buy:** Clicking on the *buy button* allows you to pay to complete your current project—if you have enough gold in your treasury. The more you try to speed up a building project, however, the more you have to pay to get it done (all that overtime work...). So, you have to pay more for each remaining (i.e., needed) "production point" to complete a building that you just started than for one that is already half completed.
- **Change:** Clicking on the *change button* takes you to the *production screen* (see next section), where you can decide which project to work on next. Note that you do not lose the effort you have placed into any current project; those "production points" get diverted into your new project. However, surplus production units (if you change production to a structure that "costs" less to build) *will* be lost.
- **OK:** Clicking on this button returns you to the *main movement screen*.

Production Screen

he *production screen* has three parts: a list of all buildings you can construct on the left side of the screen, a list of all normal units or troops you can recruit on the right and a window in the center of the screen that provides detailed information on your current construction project.

To choose or alter your current construction project, click on one of the building names or troop types along either side of the *production screen*. This also calls up information about that building or unit.

The information displayed about buildings includes the construction cost in production units, the maintenance cost, the structures and units that you will be able to build after you have constructed this building and any other important effects this structure has.

The information displayed about units includes their construction costs and statistical information (number of hit points, defense rating, special abilities, etc.). Detailed information on unit types is included in **Normal Units** and **Table I: Standard and Race-Specific Units** in the **Appendix**.

When you have chosen a project, click on the *OK button* at the bottom of the screen to confirm your selection. If you decide to make no changes in what the city is building, click on the *cancel button*. Either button returns you to the *city screen*.

BUILDINGS

You are notified whenever one of your cities has completed construction of its latest project. At this time, you are whisked to that city's *city screen* so that you may choose a new building project. The default project for a city that has completed construction of a building or unit is "Housing". This option invests production into new housing to encourage city growth. Cities can also devote their production to a number of other things: buildings, troops and trade goods. Troops are discussed in **Normal Units**.

Cities can only produce those buildings for which they have the requisite materials (terrain types), previously constructed buildings (for example, construction of a temple requires prior construction of a shrine) and knowledge (race-dependent; see **Select Race**).

Buildings require a certain total number of production points before they are completed. The length of time, then, that it takes a city to produce a particular building depends on the number of workers it has, the tax rate and any other productivity modifiers (see **Production**). The construction of troops follows the same principle. However, housing and trade goods (chosen from the *production screen*) are ways in which a city can divert production to generating more townspeople (by building housing to increase the growth rate) or more gold (through trade goods).

If you have sufficient gold reserves, you may choose to buy a building or military unit instead of constructing it (see **Buying or Changing Production**).

Buildings have maintenance costs, which are automatically paid from your income every turn. Maintenance costs in excess of income are drawn from your gold reserves. Buildings or military units for which there is insufficient gold to pay these upkeep costs either disband or die (military units) or are automatically sold at half price (buildings and city walls). If the required gold to maintain units and buildings is unavailable, military units disappear (those with lower upkeep costs are the first to go) before buildings (which are randomly sold).

Table G: Building Types in the **Appendix** shows the cost to produce and maintain the different buildings. If any previously constructed buildings or terrain types are necessary for the construction of a building, this is also indicated. The special effects of having a building in a city are listed; these may include special troops or buildings which you can now construct because you have the required building in place, increases in food, magic power, production, etc.

TROOPS

The *production screen* allows you to create units instead of buildings. By clicking on one of the unit types listed along the right side of the *production screen,* you call up information on that unit type (see **Basic Unit Information**), including its production cost. The selected unit can then be confirmed as chosen for construction by clicking on the *OK button* at the bottom of the *production screen*.

Note that when a unit is completed, you are not informed about this in the same way as you are when a building's construction is finished. Instead, as soon as a unit is complete it becomes active (outlined in red). You are automatically taken to the new active unit, at which time you can decide whether to station the unit there (select *patrol*) or move it elsewhere (click on a target map square in the *main movement screen*). See **Unit Actions** for specific information on what units can do.

Once a city starts producing a unit type, it continues to do so until you change its production to something else. The city does *not* automatically revert to producing housing, as it does when a building project has reached completion.

Building An Army contains extensive information on the available units and creatures in *Master of Magic*.

Expansion and Meeting Your Neighbors

After you've oriented yourself to the basic tools in *Master of Magic*, it is time to start taking some action! While the earliest parts of the game involve exploring the immediate vicinity of your hamlet and maybe constructing a few buildings, the next stage of the game requires that you take a little more control of the situation. It is time to start seriously exploring and expanding into the rest of your starting world, maybe even poking your nose into the other plane of existence. As you expand your territory, you develop more cities, take over some nodes (for magic power), learn more spells and meet your competitors.

Expansion

xpansion in *Master of Magic* can take place in one of two ways. You can either build settlers (see **Production Screen**) to establish outposts or conquer existing cities. The best approach for your wizard depends on where he or she starts the game and how "built up" the neighborhood is already.

THE OUTPOST

To build a new city, you first have to go to the *production screen* in one of your other cities (see **City Screen**) and click on the *settlers button*. When you have constructed a settlers unit (note that it "costs" a townsperson to build this unit), decide on the best location for your new city. Spend some time examining the terrain in areas that are clear of other towns. The terrain types within two map squares of a city map square (specifically, all the squares except for the four corner squares in the 5X5 area centered around the city) determine the maximum population for the city and the special resources available to the city; a synopsis of a city's potential on a selected map square is accessible via the *surveyor button*. See the **Surveyor**, **Terrain** and **Terrain Specials** sections for relevant information.

Note that you can only build new cities on map squares that are at least three map squares away from all other cities on the same world. If you start a new city only three map squares away from another city, however, the map squares that both cities share (as a result of being built so close together) yield only 50% of their output to each city. Land that is shared is demarcated in the *city map window* of the *city screen* by a red 1/2 in the shared map squares.

When you have selected a suitable site for a new city, send your settlers to that map square and select the build option. The settlers then quickly build an outpost (which you get to name) and populate it (i.e., the settlers disappear). The outpost starts with one population unit that is one-tenth of the size of a normal city population unit. The outpost has to grow to contain ten such "mini" population units before it expands into a hamlet.

Right-clicking on an outpost displays the *outpost window*. This window has slots for ten houses. Each house that is filled in represents one mini-population unit. Grayed-out houses are empty, and the number of empty houses indicates how many more residents the outpost must acquire before it becomes a hamlet.

Every game turn offers the outpost a chance to grow or decline in size (outposts can be deserted). The direction and speed of growth depends on a number of factors:

- **Race:** Some races are better at establishing new cities than others (see **Select Races**).
- **Potential Food:** The more food the surrounding terrain (within two squares of the outpost) can potentially produce, the more rapidly an outpost grows.
- **Resources:** The presence of minerals, ores and gems in the surrounding lands increases the likelihood that an outpost grows quickly.
- **Spells:** Some enchantments naturally encourage growth (Gaia's blessing, stream of life), while others (famine, evil presence, pestilence and chaos rift) definitely discourage growth and development.

IMPERIALISM

As an alternative to expanding peacefully by building new cities, you have the option to conquer pre-existing cities. The best way to do this is to spend some time examining nearby neutral (or if you are in a really feisty mood, enemy) cities.

To examine a city, right-click on the city in the *main movement screen*. This shows a modified *city screen* (see **City Screen**) in which you can see the race that is populating the city and the buildings in the city. If the city you are viewing is not within scouting range of any of your troops, this lack of information about the troops within the city is indicated by the message "No Report". You can also view the troops garrisoned in a neutral or enemy city by running the mouse cursor over the small unit pictures above the *cityscape window* (this identifies the unit types). Pay particular attention to the race populating the city. If you conquer the city, you can use this race to build troops, settlers and buildings. Their abilities (see **Select Race**) contribute to your cause. Choose wisely!

The rest is up to you. You must decide whether you have an army of sufficient strength and numbers to take over your target city (see **Building An Army**). If you feel that your army is strong enough, you can activate the units (click on the city in which your troops are garrisoned) and move them toward the target city. Remember that you can stack no more than nine units together on any map square. If you wish to construct an army out of units coming from several different locations (for example, if you are building troops in two different cities), amass all of the troops in a convenient location before approaching your target city. You may also choose to wear down the city a little bit first by casting debilitating overland enchantments at the target city (see the **Spellbook** supplement).

Finally, when you are ready to conquer the targeted city, just move your stack of units onto the city. This immediately initiates a combat sequence (see **Combat**) with your army pitted against the city's garrison. If you are victorious, the city suffers a few losses (in buildings and population) and then becomes yours. It erects a banner of your color, and the city's production contributes to your reserves, magic power, spell research, etc.

Conquering a city generally causes a certain degree of additional unrest there. If the conquering race (defined as the race of the city where the wizard's enchanted fortress resides) is different from that of the captured city, again, unrest may result. Conquered cities, then, generally have a higher base unrest level (i.e., number of rebels) than cities that have been built up from outposts. As a quick guide, additional rebels following a city's capture range from 0 to 4 figures in its population row. Halflings, as either conquering races or conquered races, tend to cause the smallest increases in unrest levels; dark elves, klackons, high elves and dwarves, on the other hand, tend to cause the largest increases in local unrest levels. One way to handle any heightened levels of unrest is by quickly building religious institutions (shrines, temples, parthenons or cathedrals). See **Building Types** and **Select Races** for a few more details.

Magic Power and Nodes

As the game progresses, it becomes important for you to establish a strong magic power base (in order to learn new spells more quickly, to fatten up your mana reserves, to increase your spell casting skill and to increase how many enchantments and summoned creatures you can afford to maintain). The earlier you do this, the better, as any early increases in magic power "income" per turn constitute significant increases in the relative amount of magic power you have to devote to your magic skills.

There are four major sources of magic power: buildings (such as shrines, temples, parthenons, cathedrals, alchemist's guilds and wizard's guilds), races that naturally produce mana, special minerals and magic nodes. See **Select Races**, **Buildings** and **Terrain Specials** for information on the races, buildings and minerals that increase magic power.

Magic nodes are places in the worlds of Arcanus and Myrror that generate large amounts of unharnessed magic power. Magic nodes come in one of three types: chaos, nature or sorcery (there are no life or death magic nodes!). These nodes can be utilized by any wizards, but wizards with certain special abilities (Chaos, Nature, Node or Sorcery Mastery) are able to make exceptional use of some or all of these magic nodes (see **Special Abilities**).

In order to redirect the unharnessed magic power from the nodes for use by your wizard, *you must capture the nodes*. At the beginning of the game, nodes are occupied by vile creatures. Once these creatures have been eliminated (by moving an army over the node square and defeating the creatures in combat), you can send a magic spirit or guardian spirit to the node.

Both magic and guardian spirits are summoned creatures (see **Summoned Creatures** and the **Spellbook** supplement) with a special ability that allows them to "meld" with nodes. When such a spirit steps into a node square, the option for it to "meld" appears in the *unit window* (see **Unit Actions**). Melding with the node obliterates the spirit, as it is reforged into a channel that directs the node's magic power to the controlling wizard.

After a magic spirit or guardian spirit takes over a node, the map squares surrounding the node develop a colored aura that matches their controlling wizard's banner. The number of map squares that display this aura represents the size and strength of the magic node. The larger the area, the stronger the node (i.e., the more magic power it generates).

Nodes that are currently controlled by an enemy wizard can be stolen by simply moving one of your magic spirits or guardian spirits to the node. While this operation is only successful 25% of the time for nodes melded to a guardian spirit (if the current controlling wizard had a guardian spirit meld with the node), it is still an effective strategy, especially if you can protect the node. Note that you can meld the stronger guardian spirits to nodes that have already been melded to a magic spirit.

The magic power generated by nodes depends on which Magic setting was used when starting the game (see **New Game-Magic**). Powerful nodes are 50% more powerful than normal nodes, while weak nodes are only half as powerful as normal ones. Note that nodes on Myrror produce twice as much magic power as nodes on Arcanus.

In addition to being a valuable source of magic power, nodes can affect creatures within their spheres of influence. Creatures from the same magic realm as a node have enhanced attack strengths and defenses when in combat on squares from which the node draws its power (the same squares that are covered by a visible aura after a spirit melds with a node). See **Magic Nodes** for more details.

Note that no spirit may meld with a warped node (a node that has been altered by the warp node spell). This enchantment must be removed before the node can be normally used.

Spell Research

Ⓓuring the bulk of the game, research efforts (learning newer and more powerful spells) are extremely important. The speed with which you can research new spells depends on several things.

- **Spell Research Points:** Buildings such as libraries, oracles, sage's guilds, universities and wizard's guilds, as well as heroes with the Sage ability (see **Heroes** and **Special Unit Abilities**) who form part of your army, can contribute to the speed with which you can learn new spells. Each spell research point contributed per turn from these sources counts toward the research cost of each new spell.

- **Magic Power:** Your total income of magic power per turn determines how much magic power you can direct toward spell research. Magic power is obtained from a number of sources, including buildings (shrines, temples, parthenons, cathedrals, alchemist's guilds and wizard's guilds), minerals (mithril, adamantium, quork and crysx crystals) magical races (beastmen, dark elves, draconians and high elves) and magic nodes (see **Buildings**, **Select Race**, **Terrain Specials** and **Magic Power And Nodes**). The relative amount of magic power devoted to spell studies can be adjusted in the *magic summary window* (see **Magic**).
- **Special Abilities:** Some of the special abilities that wizards can have (see **Special Abilities**) increase the rate at which they learn new spells. For example, Chaos Mastery increases the rate at which a wizard learns new chaos magic spells.
- **Spell Ranks:** If a wizard has restricted his or her research to the point of acquiring eight or more spell books in that area, his or her efforts in that particular magic field proceed at a more rapid rate than normal (see **Spell Ranks**).

Beside acquiring new spell knowledge through diligent study, a wizard can learn new spells through exploration (examining ancient ruins, towers of wizardry, etc., see **Terrain Specials**) or trade (see **The Art of Diplomacy**).

Meeting Your Neighbors

When you get close to another wizard's territory for the first time (i.e., when you get within scouting range of one of their cities), that wizard initiates contact with you. Contact may also be established when another wizard gets within scouting range of one of your cities. When you first meet another wizard (and at various later points throughout the game) you may wish to "size him up" and start talking with him or her.

ENEMY WIZARD STATISTICS

There are several ways to assess the threat posed by another wizard.

In the *magic summary screen* (see **Magic**), right-click on the portrait of an enemy wizard. This calls up a screen that is almost identical to your own Mirror screen (see **Mirror**). Here you can see the spell ranks (books), special abilities, total gold reserves, total mana reserves, fame and hero list of the enemy wizard. In addition, you get a brief synopsis of that wizard's personality and objectives and the current status of your relations (including any treaties) with the wizard (see the following sections).

In the *magic summary screen* itself, below the enemy wizard's portrait, you'll find a brief synopsis (like "neutral" or "unease") of your current relationship with him or her.

Comparative information is also available through your Historian (*History of Wizards Power* graph) and your Astrologer. The latter holds vital information concerning the relative army strengths, magic power and spell research efforts of all known wizards (including yours). See **Historian** and **Astrologer** for more details.

ENEMY WIZARD PERSONALITY TYPES

An important part of assessing what you are up against is paying attention to the personalities and objectives of enemy wizards. These traits are based on the kinds of magic they practice and exert a powerful influence on your diplomatic relations with them.

Wizards' personalities influence how they deal with other wizards:

- **Aggressive** wizards attack any time they feel that they are in an advantageous position.
- **Chaotic** wizards have severe mood swings and, as a result, are completely erratic. They may feel peaceful sometimes and wildly aggressive at others.
- **Lawful** wizards believe in dealing openly and honestly with others. Never spontaneously attacking those with whom they are on good terms, these wizards react fiercely and decisively when unprovoked attacks are launched against them.
- **Maniacal** wizards display an unabating hostility toward all others. Positive diplomatic actions toward them go almost unnoticed, while negative ones are noticed almost before they start!
- **Peaceful** wizards believe in compromise and harmony; they are likely to seek peace even after aggressive actions are taken against them.
- **Ruthless** wizards need no reason to attack. Their thought on the subject of war is that a strong offense is the best defense. They have no moral qualms on the issue of sacrificing their own people on the altar of conquest.

Wizards also have different fundamental philosophies on how best to allocate their resources:

- **Expansionist** wizards are most interested in controlling vast territories and view settlers and the establishment of new outposts as the most effective means to this end.
- **Militarist** wizards believe strongly in establishing large and powerful armies.
- **Perfectionist** wizards are interested in urban development. They focus primarily on city improvements, both through the elevation of new buildings and the casting of positive city enchantments.
- **Pragmatist** wizards believe in a balanced approach to reaching the objective of conquering the worlds. In their quest, they focus in roughly equal measure on expanding territories, building adequate armed forces and spell research.
- **Theurgist** wizards thirst for knowledge and focus a large part of their resources on spell research.

THE ART OF DIPLOMACY

At the beginning of the game, each pair of wizards has a diplomacy rating that is designed to reflect the inherent suspicions and prejudices that differences between beings can generate. The general rules are that 1) every spell book (rank) that two wizards share makes them feel friendlier toward each other, and 2) spell books in life magic always generate positive diplomatic feelings, while books in death magic always generate a sense of distrust and concern. Note that wizards who specialize in death magic are intrinsically suspicious, even of other practitioners of this art.

Your diplomatic relations with enemy wizards depend primarily on your actions. Positive diplomatic actions on your part improve relations, while negative diplomatic actions harm relations. Like most things, diplomatic relations tend to slide back to their base level (the original state of affairs) when you do nothing at all. Note that all diplomatic relations are easier if your wizard is Charismatic (see **Special Abilities**).

Diplomatic actions that are viewed positively by your opponents are the kinds of things that you would view positively if done for you by an enemy wizard. When you are trying to establish positive diplomatic relations with another wizard you can give gifts (tribute), trade more powerful spells for weaker ones, attack that wizard's enemies (those wizards with whom he or she is at war), establish and maintain wizard pacts or alliances and cast spells that affect the wizard's opinion of you (aura of majesty). Note that you may not cast positive spells (such as positive city enchantments) on another wizard's cities or properties in an attempt to improve diplomatic relations with that wizard.

Diplomatic actions that are viewed negatively include obviously aggressive acts such as attacking the opponent's cities or troops, casting spells that negatively affect the opponent's cities and other properties, breaking treaties, casting the game-ending spell of mastery (see **Winning and Losing**), summoning powerful fantastic creatures and building up excessively large armies near the opponent's cities. When one wizard eliminates another from the game by force, other remaining wizards get quite upset with the conquering wizard. Negative diplomatic actions also include actions that provoke feelings of envy in your competitors, such as having more cities or more magic power than they have! Finally, the death magic spell subversion generates a great deal of contempt for one enemy wizard, creating a great sense of ill will toward him or her. A quick note on reputation: every treaty you break labels you as untrustworthy and *permanently* worsens your relations with all wizards (although it has the greatest effect on the wizard with whom you broke the treaty). Just remember that every time you break a treaty (even accidentally!), the rest of the world knows and remembers.

So how do diplomatic relations affect your interactions with other wizards? Basically, the relations your wizard has with other wizards determine how they weigh your behavior. If a wizard is loyal toward yours, he or she is likely to put the kindest interpretation on your actions; a wizard who thinks yours is lower than snail slime despises him or her on principle and, therefore, dislikes almost everything your wizard does. The status of your relations determines how easy it is to form wizard pacts, to trade for spells and to form alliances. If relations are very poor, there is an increasing probability that your opponent will attack you.

Quick Notes on War

If you attack an opposing wizard's city, that is viewed as an automatic declaration of war.

While enemy wizards may view your accumulations of wealth and magic power with envy, they despise opponents significantly weaker than themselves. If an enemy perceives that he or she is much stronger than your wizard, there is a good chance that the enemy wizard will start a war with you.

Finally, once you have started casting *spell of mastery* (the successful completion of which ends the game, leaving the caster victorious), every other wizard in the game, regardless of prior relations, will declare war on you.

Trading, Treaties, Alliances and Pacts

To start communicating with another wizard, click on that wizard's portrait when you are in the *magic summary screen* (enter this screen by clicking on the *magic button* in the *main movement screen*). The wizard appears flanked by gargoyles. The eye color of the gargoyles is a measure of your opponent's feelings toward you. The eye color ranges from deep shades of green to vivid red, with green representing positive relations, yellow representing neutrality and red representing anger and negative feelings.

How a wizard feels toward you also defines the limit of his or her patience when dealing with you. Each time you beseech a wizard on any given subject, whether she accepts or rejects your proposal, you wear down her patience a little bit more (of course, if she rejects your proposition, you wear it down a lot faster!). As her impatience increases, her willingness to accept your propositions decreases. Over time, though, her patience toward you slowly returns. Therefore, try not to ask for a lot of things during a single parlay with another wizard. Ask about one or two items today, and then let a few turns pass before bothering that wizard again. In this way, you can keep an opponent's patience toward you high so he or she is more likely to accept your proposals.

Underneath the wizard is a series of conversational options. Click on any conversational option to select it.

- **Propose Treaty:** This option gives you a chance to improve and solidify relations with another wizard, and calls up the following possibilities:

  a) **Wizard Pact:** This is basically an offer for a nonaggression agreement that only has a chance of acceptance if you are on good terms with the other wizard (gargoyle eyes are green). You and your opponent agree not to attack each other and to stay out of each other's territories (specifically, by not moving into squares adjacent to one another's cities). If you violate this treaty, you will be enjoined to leave. If you do not leave, you have broken the wizard pact and you are remembered for having done so by all opponents. The longer a wizard pact is in effect, the greater the improvement in your diplomatic relations with the other wizard.

  b) **Alliance:** An alliance is an exceptionally strong wizard pact. In addition to the terms of the wizard pact, you are expected to come to the aid of your allies (by declaring war on those that threaten or attack them). Likewise, your allies are expected to come to your aid when your wizard is threatened by others. The longer an alliance is in effect, the greater the improvement in diplomatic relations between the allies.

  c) **Peace Treaty:** Peace treaties are established when both parties want to end a war. Generally, your opponents are more willing to consider this option (or to suggest it) if you are inflicting heavy losses on their armies and cities. Of course, an opponent wizard is far less interested in peace when winning a war! In spite of this, when a city changes hands, peace talks are often considered. Then, as long as aggressive actions (in either direction) cease, relations stabilize and peace treaties may be formed. Once a peace treaty is in place, the opposing wizard will not attack you for about the next dozen turns. If you attack him or her, however, during this 8 to 15 turn period that the peace treaty remains in force, you will be viewed as untrustworthy and negatively remembered by all wizards for the rest of the game!

  d) **Declaration of War on Another Wizard:** When you are on good terms with another wizard, you may consider asking for his or her help in fighting another enemy. The likelihood that someone agrees to help fight depends on the relative strengths of their diplomatic ties to the other wizard and to you.

  e) **Break Alliance with Another Wizard:** When you are on good terms with another wizard, you may ask him or her to break a pact or alliance with an enemy wizard. This is a good first step to take when trying to get him or her to agree to declare war on that enemy.

  f) **Forget It:** This option takes you back to the main conversation screen to select another option.

- **Threaten/Break Treaty:** This is one way of notifying other wizards about your plans. It is also a way of getting other wizards to try to appease you by giving them an opportunity to offer tribute; they may also try to appease you by declaring a de facto, unilateral

peace treaty with you (see notes on peace treaties above). Finally, this approach may be used to try to goad your opponents into breaking treaties so that you do not have to take the permanent negative diplomatic penalty for doing so yourself! Your options (depending on the state of your relations with them) are as follows:

a) **Break Wizard Pact**: You no longer agree not to attack your opponent, nor to stay out of his or her territories (specifically, you can now move into squares adjacent to one another's cities). You are remembered by all opponents for breaking a pact. However, to court another wizard who hates your former pact-mate, it may be necessary.

b) **Break Alliance**: In addition to negating the terms of a wizard pact, you no longer agree to come to the aid of your allies (by declaring war on those that threaten or attack them). Likewise, your allies no longer come to your aid. Again, your reputation suffers, but breaking an alliance allows you to reposition yourself in global politics.

c) **Threaten to Attack**: Threatening to attack is the only situation under which other wizards may 1) offer to appease you with gold, mana or spells; 2) cower and declare a unilateral peace treaty; 3) ignore what they view as mere posturing on your part; or 4) get angry and immediately declare war on you! In making these choices, they consider their total power compared to yours (see **Historian**).

d) **Forget It**: This option takes you out of these potentially dangerous diplomatic waters and back to the previous screen.

Note that a threat to attack is not the same thing as actually breaking a treaty.

- **Offer Tribute:** You can try to improve your relations with enemy wizards by giving them gold, magic power and spells. The amount of an item that you give (in relation to how much they already have) determines how positively a particular tribute affects your diplomatic relations with the other wizard. Of all gifts, new spells are the most highly valued and exert the greatest diplomatic effects. In addition, other wizards always remember you favorably if you have ever given them spells as tribute and take this into account during future interactions with you.

- **Exchange Spells:** Finally, wizards can trade spell knowledge with each other if they have spell books (ranks) in the same magic realms. Wizards can receive a new spell in trade only if they do not already know the spell and if it is one they could have learned in some other way (based on how many spell ranks they have in the spell's magic realm, see **Spell Ranks**). Note that if you exchange more powerful spells for weaker ones, the difference in their values earns you positive diplomatic points with the other wizard (as "change")! Note that, sometimes, deals with other wizards are open to haggling, and you may have the option to influence their final decision by offering them a little extra gold or magic power to get them to accept your proposal.

- **Good-bye:** When you get tired of communicating with the other wizard (they may leave first if you wear them out with too many questions or requests), click on this option to return to the *magic summary screen.*

Building An Army
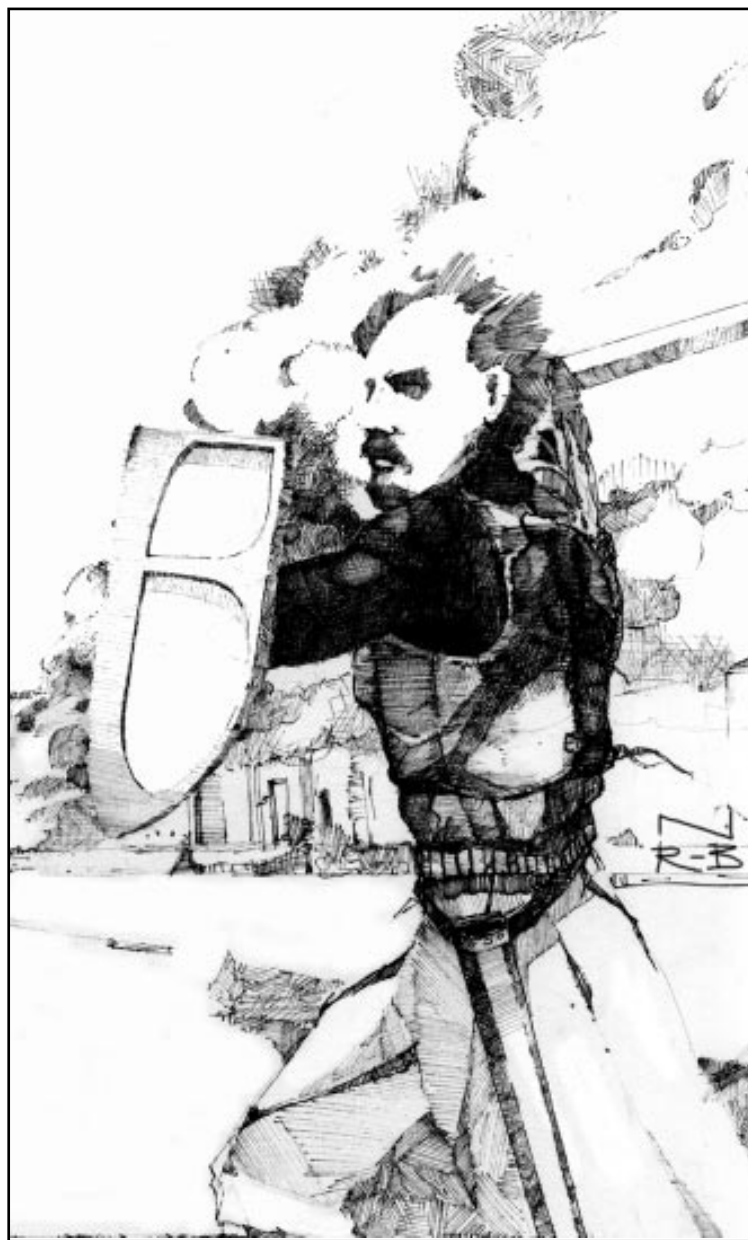
At almost every point during *Master of Magic*, it behooves your wizard to construct (or to have nearby) units or creatures of various types. During expansion phases, your wizard builds settlers. When taking over magic nodes, your wizard summons magic or guardian spirits from other realms. Exploration of other parts of the world, plundering ancient ruins and braving creature lairs all require at least one group (stack) of units traveling together as an army. Eventually, protecting your cities and precious magic nodes will require troops as well.

There are two fundamentally different types of units: normal and fantastic. *Normal units* are those formed by the races that populate Arcanus and Myrror. *Fantastic units* are summoned creatures. The following sections describe the kinds of units you can build, summon and hire.

Normal Units

ll units; whether fantastic or normal, have common basic features that are described in the next section. A detailed list of normal units and their special features are in **Table I: Standard and Race-Specific Units** in the **Appendix.**

BASIC UNIT INFORMATION

Information about units can be obtained by right-clicking on their pictures in most of the game screens. This calls up a *unit statistics window*. This window shows the size of the unit (i.e., the number of figures it has), its cost (in magic power or gold) or its upkeep cost (depending on the screen), the unit's attack strengths, defense, resistance to magic, movement capabilities, the unit's experience level and special abilities (see **Special Unit Abilities**), if any.

Units may also be dismissed from this *unit statistics window* by clicking on the *dismiss button*.

Unit Size and Healing

Every unit has a specific number of figures in it. The number of figures in a unit is shown in the picture in the upper left corner of the *unit statistics window*. This number ranges from one (for some of the fantastic summoned creatures) to eight.

When a figure within a unit dies (which occurs when the total damage done to the unit is equal to or greater than the number of "hits" or "hit points" of an individual figure), the attack strength of the entire unit goes down by the attack strength of the individual figure.

If your troops win a battle, damaged units that have lost individuals during the battle can slowly regain them. That is, individual figures "regenerate" even when units cannot (units can normally regenerate only if they have Regeneration as a special ability, see **Special Unit Abilities**). You can view this "regeneration" as your units recruiting replacements over time. Within damaged units, individual figures will heal slowly over time. Healing rates are 5% of total hit points (of the undamaged figure) per turn when units are outside of cities, 10% when garrisoned in cities, and 15% when garrisoned in cities that have an animist's guild. Finally, when units occupy map squares with Natural Healers (see **Special Unit Abilities**), they heal an additional 20% of their total hit points per game turn!

Cost and Upkeep

Normal units cost production units (or their equivalent in gold) to build, and both food and gold to maintain. The upkeep costs of normal units are based on their construction costs: one gold piece per turn for every 50 production units. In addition, every normal unit requires one food unit per turn. Whenever maintenance costs (either gold or food) cannot be met, units start dying (the units with lowest upkeep costs disappear first).

Fantastic units are summoned creatures. Since their "cost" is really the magic power required to summon them, their upkeep costs are in magic power. The upkeep costs for the various summoned creatures can be found in **Table J: Summoned Creatures** in the **Appendix**.

Movement

At the top of the *unit statistics window* is information on the speed and movement type (walking, flying, swimming, etc.) of the unit. This information is represented by a number and a symbol (such as a boot for walking and wings for flying). The number is the *movement speed* and indicates the number of squares a unit can move per turn either in combat or overland. The symbol indicates the type of movement of which the unit is capable. These movement types are described in detail in **Table C: Basic Movement Types** in the **Appendix**.

Melee Strength

The melee (hand-to-hand) attack strength of a figure in a unit is indicated in the *unit statistics window* by the number of swords next to the word "Melee". Each sword represents one basic attack (where each attack has a 30% chance of doing one point of damage). The number of swords, then, is the total amount of damage the unit can theoretically do to an opponent in melee combat.

Weapons that provide *bonuses to hit* (magic weapons constructed by alchemist's guilds) or spells that have the same effect (holy weapon) increase the probability that each basic attack meets its mark (i.e., the 30% chance goes up by 10% per bonus point). If units are fighting with mithril or adamantium weapons or with plain magic weapons that have been created by their local alchemist's guilds (see **Table G: Building Types** in the **Appendix**), special icons indicating this appear in the lower half of the *unit statistics window*. That is, you see a "mithril," "adamantium" or "magic weapon" icon.

Spells and special abilities (such as Might) that increase *attack strength*, increase the number of basic attacks a unit gets (i.e., they increase the number of "swords" in the *unit statistics window*).

During battle, units can respond to all melee attacks directed against them as well as attack on their own, potentially giving them several opportunities every turn to inflict damage with their melee weapons (sword icons). Both the attacker's and defender's melee attacks can be defended against; each attack-and-defense segment gets resolved simultaneously (see **Combat**).

Ranged Attack Strength

In the *unit statistics window*, there is a ranged attack row. If a unit can conduct attacks over distance (ranged attacks), this row contains a series of *bows* (if the unit uses a missile weapon), *fireballs* (if the unit casts ranged magic attacks) or *rocks* (if the unit uses rock throwing as its ranged attack). As with melee attack strength, the strength of a ranged attack is indicated by the number of small symbols in the ranged attack row.

Ranged attacks are handled in the same way as melee attacks. Every symbol represents one basic ranged attack, which has a certain probability of doing one point of damage to the target.

The longer the distance to the target, though, the less likely it is that a missile or rock-throwing attack meets its mark. These distance-dependent penalties for non-magic ranged attacks do not come into play until the target is more than two squares from the attacker. See **Ranged Attack** under **Combat** for more details.

Because ammunition is expended in launching ranged attacks, the number of ranged attacks a unit can conduct during combat is generally limited as indicated in the *active unit window* (see **Combat**). While most ranged attacks have preset limits, heroes that have magic ranged-attack capabilities may throw magic bolts at a cost of three mana apiece. The mana they expend in throwing magic attacks is their own, and when their magic power is depleted they cannot throw any more magic attacks until their next battle.

Defense

The armor row in the *unit statistics window* indicates, by the number of shields, the defense rating of the unit. Each shield represents one chance (30%) to stop one successful basic attack (one damage). Damage that is not stopped decreases the hit points of the defending figure. If the defending figure dies, then the next figure (if any remain in the unit) becomes the defender.

Note that defense blocks both non-magic and magic melee or ranged attacks. The following attribute, *resistance*, describes a unit's ability to resist spells *only*.

Resistance

The resist row indicates, by the number of crosses, the level of resistance to spells (including resistance to some special abilities such as Poison Attacks, Life-stealing, Gaze Attacks, etc.) of the figures in the unit. Every level of resistance adds 10% to the chance of successfully resisting negative magic spells cast on the target. For example, if a unit has four crosses, this indicates that the unit has a base chance of 40% of resisting enemy spells.

Hit Points (Hits)

Hits, represented by hearts in the *unit statistics window*, indicate the number of hit points each figure has within a unit. When a unit takes damage, the number of hit points left (for the damaged figure) is symbolized by the number of undarkened hearts. The number of darkened heart symbols represents the number of hit points lost (i.e., total damage taken) by that figure. A figure dies and is removed from the unit when it loses all of its hit points. The hits row of the *unit statistics window* is then replaced by a row of undarkened hearts as the next figure in the unit steps forward.

Experience Levels

Fantastic (summoned) creatures do not gain experience levels, but normal units and heroes do. The experience level of a unit is indicated in the *unit statistics window*. Normal units can have experience levels ranging from recruit to champion.

Experience levels for normal units can increase in several ways: with the passage of time, through fighting (and surviving) battles, by being stacked with heroes that are Arms Masters (see **Special Unit Abilities**) and through magic (heroism, crusade). In addition, some institutions (fighter's guild, war college) raise the levels of newly created normal units. Warlord wizards (see **Special Abilities**) have troops that are always one experience level in skill ahead of their counterparts' (i.e., wizards who are not Warlords).

Special note: *normal units that have become undead creatures do not gain experience* (see **Special Unit Abilities**).

Experience levels are indicated on the unit pictures (in the *main movement screen, armies screen, city screen*, etc.) by colored circles of silver and gold.

Increases in experience levels are associated with commensurate increases in various unit statistics. **Table H: Normal Unit Bonuses for Experience** in the **Appendix** shows how unit statistics rise with experience. The indicated bonuses reflect increases to the unit's base levels for the indicated attribute.

Special Abilities and Enchantments

Any special abilities and unit enchantments appear as icons in the bottom half of the *unit statistics window*. Clicking on the enchantments removes them (if they were cast by your wizard). Right-clicking on the enchantments or abilities describes their effects.

Attribute modifiers (both positive and negative) from enchantments and special abilities (see **Special Unit Abilities**) or from carrying special items are always incorporated in the statistics shown on the *unit statistics window* (i.e., the number of swords and shields is always current). The only exception is if the attribute modifier is conditional in some way (for example, ranged defense provided by shields (see **Artifacts**) only applies to defenses against ranged attacks); in this case, the modifier is not reflected in the number of swords or shields in the *unit statistics window*.

LIST OF ALL NORMAL UNITS

Table I: Standard and Race-Specific Units in the **Appendix** shows all of the units that can be built from *city production screens*. These are all considered *normal* units. Many of them are standard types (i.e., units available to many or all races), while others can only be built by a particular race.

Each unit type is followed by a number indicating total figures in the unit. Any racial requirements are listed, as is the cost, (in production units) of building the troop. Note that upkeep costs for units are one food plus one gold piece per fifty production units in building cost.

Also indicated in the table is the melee (hand-to-hand) strength of the unit (symbolized in the *unit statistics window* by sword icons) and the ranged attack strength (bows). The ranged attacks are described as follows: an 8 Magic (3) ranged attack is a strength eight magic attack that can be thrown three times during a single battle.

Also shown are the defense ratings (shields), resistance to spells (crosses) and hit points (hearts) of each unit. Movement speed and type are indicated as well as any special abilities (descriptions of these can be found under **Special Unit Abilities**).

Summoned Creatures

W hile the summoned (fantastic) creatures are similar in many ways to normal units (see **Normal Units**), they are also different. They are beings that have been summoned from other planes of existence to the summoning circle of a wizard and bound to his or her will. It costs magic power both to summon and to maintain these fantastic beings. Unlike normal units, they are fully mature when they arrive and, therefore, gain no experience while on Arcanus and Myrror.

While all summoned creatures bear the marks of the magic realm that begot them, those that have been called by and formed from the power of death magic (including undead creatures) are special in many ways. They are considered *creatures of death* and have immunity to Cold, Poison and Death Magic. They do not heal as normal units or even as other fantastic creatures do. Instead, the only way they recover from damage is if they have special Regeneration skills or through the use of Life-stealing Attacks. (see **Special Unit Abilities** for exact details on the various kinds of immunity, Regeneration and Life-stealing Attacks here mentioned). Although they do not heal easily, creatures of death tend to cost a lot less in maintenance than creatures of comparable power from other realms of magic.

Table J: Summoned Creatures in the **Appendix** shows the kinds of creatures that can be summoned in *Master of Magic*. The number of figures in a summoned unit is indicated, as is the magic realm from which it is called. Upkeep costs (in mana), melee attack strength, ranged attack strength, defense, resistance to magic, hits (hit points), movement speed and type are all indicated on this table. Any special abilities that characterize the summoned creatures are also listed. (For more information on basic unit statistics or special abilities see **Basic Unit Information** and **Special Unit Abilities**.)

Ranged attacks are described according to the following example: a 4 Missile (3) would be a missile attack of strength four which the unit could launch no more than three times during a single battle.

Mercenaries and Heroes

F rom time to time, wandering troops and heroes ask to join your cause. Note that the more famous your wizard, the more frequently wandering troops approach you and the more likely these mercenaries are at higher experience levels. Mercenaries generally arrive in groups of one to three units. Note that nonhero mercenaries are always some normal (i.e., non-fantastic) type. Mercanaries of the Myrran races only approach wizards who have contact with Myrror in some way, such as wizards who own a city on Myrror, an astral gate, or a tower of wizardry. A higher fame level increases the chance that more units approach at one time. See **Fame** for more information.

Most of these units require both an initial fee (in gold, with a higher fee for more experienced units) to join you and upkeep costs (in gold and food, although heroes require no food). If you agree to let them join your forces, the initial payment amount is withdrawn from your gold reserves and the unit (activated) appears in your enchanted fortress. The special ability Charismatic (see **Special Abilities**) or a higher level of fame allows your wizard to hire troops at a lower initial cost. After you have hired mercenaries or heroes, they are under your control and do not leave until they die or you dismiss them.

HEROES

Heroes are mercenaries of exceptional abilities. Not only can they wield powerful artifacts (see **Artifacts**), but they also frequently possess unique skills that enhance the controlling wizard's capabilities. Heroes are also able to acquire experience levels far beyond those of normal troops!

When heroes come to a wizard's enchanted fortress looking for work, that wizard is not obligated to hire them. If a wizard refuses to hire a hero, he or she leaves only to return (with a higher experience level) at a later date. However, level advances accrued in this way stop at the Commander level (see **Table K: Hero Experience Levels** in the **Appendix**), so no hero approaching you for hire is ever more experienced than this. The only exception is "The Chosen" (described below) who can be resummoned after dying. *Note that only six heroes can work for your wizard at any one time* and that new heroes do not appear if you already have six in your service!

There are a total of 35 hero prototypes in *Master of Magic*. The specific features and statistics of most of the heroes vary from game to game, and some of the heroes only show up if your wizard has knowledge of life or death magic. The mightiest of the heroes ("The Chosen") can only appear when summoned (see the spell incarnation in the **Spellbook** supplement). Note that when you hire heroes, you can rename them.

If a wizard is impatient to acquire new heroes, the wizard can cast the arcane spells summon hero, summon champion or the life spell incarnation to summon a hero to his or her enchanted fortress (see **Spellbook** supplement). The summoned hero waives his or her initial hiring fee in this case. Note, however, that a wizard is not obligated to hire a hero summoned in this way.

Heroes are unique beings and, if they die, unless they are resurrected (a life magic spell), they never return! The exception to this rule is that "The Chosen" (summoned by casting incarnation, another life spell) can be resummoned. This hero returns upon summoning with the same experience he had when he died!

When heroes die, the powerful artifacts they carry become the property of the victor. If, however, the hero dies or disappears because one of the following spells is cast: banish, cracks call, disintegrate, dispel evil, holy word or unsummon, any items he or she is carrying disappear with the hero.

Just as for normal units, right-clicking on the hero pictures in most of the game screens brings up the hero's *unit statistics window*. Hero *unit statistics windows* differ slightly from those of other units. Arrows appear in the bottom half of the window. Clicking on the lower arrow shows all of the hero's special abilities (see **Special Unit Abilities**). Clicking on the upper arrow takes you back to the regular window. The hero's *unit statistics window* also shows the items with which he or she is equipped (see **Items** and **Artifacts**).

Abilities that are unique to heroes are Agility, Arcane Power, Arms Master, Blade Master, Charmed, Constitution, Inherent Spell Knowledge, Leadership, Legendary, Might, Noble, Prayer Master, Sage and Spell Caster (see **Special Unit Abilities** for descriptions of these skills). Many of these skills give increasing benefits as a hero gains experience levels. The bonus that a hero is currently getting from being skilled in an area is numerically shown in the hero's *unit statistics window*. Note that some heroes (either due to chance or because of their natures) are intrinsically better at some skills than other heroes. Depending on a hero's intrinsic ability in an area, he or she can be up to twice as skilled in a particular special ability than normal (at the expense of being less skilled or unskilled in other special abilities).

Experience levels are indicated on the heroes' pictures (in the *main movement screen, armies screen, city screen*, etc.) by colored circles (silver, gold and red, see **Experience Level Representation**).

Table K: Hero Experience Levels in the **Appendix** shows the increases in a hero's statistics for increasing experience levels.

Special Unit Abilities

Many units have special abilities that make them different from other units. Even standard units are often granted special abilities by the race of the troops. In addition, many special abilities can be added to units by casting enchantments on them (see **Spells and Spell Casting**). The following table defines all of the special abilities available to units. *Abilities available only to heroes are indicated by an asterisk* (*). There are "super" variations of all hero special abilities that give an additional 50% bonus.

LIST OF SPECIAL UNIT ABILITIES

Special Ability	Properties
*Agility	Increases hero's defense (shields) by one per experience level of the hero.
*Arcane Power.	Increases magic ranged attack strength by one per experience level of the hero.
Armor-Piercing Attack	Halves defense (shields) of defender (rounded down).
*Arms Master	Adds two experience points per turn (per experience level of the hero) to all units (excluding other heroes) in the same stack as the hero at the end of every turn.
*Blade Master	Increases chance to hit on all attacks by one (i.e., by 10%) per every two experience levels.
(+ #)Bonus to Hit . . .	Increases the chance to hit by 10% per bonus number (#).
Builder	Can build roads.
Cause Fear	In melee combat, opponents may be so paralyzed with fear that they are unable to attack; the probability of this occurring depends on the defender's resistance (crosses).
*Charmed	Resistance rolls always succeed.
*Constitution.	Increases hits (hearts) by one per experience level.
Creates Outposts	Can build outposts.

Creates Undead . . . . . This basically creates new undead creatures when units are destroyed in combat. If killed units had more than half their hit points destroyed by a creature with the Creates Undead ability, then they rise from the dead after combat under the control of their former enemies! The new undead units have the same abilities they did before, *but now they can no longer heal.* Undead units cannot be created if a map square already had nine units on it. Note that undead creatures are viewed as creatures of death!

Creature Summoning. . . . . Allows unit to summon a creature (specified by the special ability of the unit) instead of attacking during a combat turn. Summoned units are randomly placed on the combat screen and do not last beyond the duration of the battle itself.

Death Gaze . . . . Before engaging in melee combat (offensive or defensive), each adjacent opponent must either resist the Death Gaze or die. If killed, the opposing figure has no opportunity to counterattack.

Death Touch . . . . Immediately after engaging in melee combat (both offensive and defensive), one opponent figure for each creature with Death Touch must resist the touch or die instantly.

Doom Gaze . . . . Before engaging in melee combat (offensive or defensive), an enemy unit automatically takes damage equal to the strength of the gaze, with no defense possible. If opponents are slain by the gaze, they have no opportunity to counterattack.

Fiery Breath. . . . . Before engaging in melee combat (when attacking only!), opponents must withstand Fiery Breath. Opponents slain by this breath cannot counterattack.

Fire Immunity . . . . . . Immunity from Fiery Breath, Fire Elemental, Efreet magic attacks, Immolation, Fire Bolt, Flame Blade, Fireball, Wall of Fire, Metal Fires, Fire Storm, Stone Rain, and Meteor Storms.

First Strike. . . . . When attacking, unit deals damage before melee attacks, but after gaze attacks.

Forester . . . . In Forests, gain one movement point per square for all stacked units.

Great Wind Walking. . . . . Allows the unit's entire stack to fly overland.

Holy Bonus . . . . Increases attack strength (swords), defense (shields) and resistance (crosses) of all friendly units in combat by bonus level of holy bonus; only the best Holy Bonus applies at any one time.

Illusory Attack . . . . . . Attacker ignores defender's armor (shields).

Immolation . . . . Every opponent engaged in melee combat is subjected to a strength four fire attack; this occurs at the same time and in addition to melee combat.

Immunity to Cold . . . . Unit unaffected by cold attacks: Ice Bolt, Ice Storm.

Immunity to
Death Magic . . . . Unit unaffected by spells causing death and fear: black wind, death spell, death wish, life drain, terror, etc.

Immunity to
Illusion . . . . Negates Illusory bonus of Illusory Attacks; Unit is unaffected by Illusory spells: mind fires, vertigo, word of command; Unit can see Invisible enemies.

Immunity to
Missiles . . . . Unit unaffected by all missile attacks (bows).

Immunity to
Spells . . . . Unit unaffected by spells of any type or by ranged magic attacks.

*Inherent Spell
Knowledge . . . . Spells accessible to the hero (such spells are not necessarily part of the wizard's spell book); these spells appear during combat.

Innate Spell
Ability . . . . Allows some units to cast specific spells once per battle; referred to in creature and unit descriptions as "Can cast X once per battle," where X is the specific spell.

Invisibility . . . . Opponent suffers a penalty of one on his chance to hit (i.e., has a -10% chance to hit); Immune to ranged attacks unless attacker is in an adjacent square.

Large Shields . . . . Adds two to defense (shields) against all ranged attacks (including missile, magic, rocks). It also adds +2 to defense against thrown and breath attacks.

*Leadership . . . . Increases melee attack strength by one per three experience levels of the hero to all normal units on the battlefield; note that Undead, Black Channeled or Chaos Channeled units which were once normal do not get this bonus. Only the highest Leadership bonus applies.

*Legendary . . . . The hero adds one point to the wizard's fame for every three experience levels he or she has. Increases frequency and strength of mercenaries approaching the wizard, while decreasing their hiring costs.

Life-stealing
Attack . . . . Replaces the standard melee attack with a resistance check. The opponent (defender) must make a resistance check for each point of the

attacker's melee strength (swords). For each failed check, the opponent loses one hit (heart). For every two failed checks, the attacker gains one hit. If the opponent is killed and more than half of his total hit points are stolen in this way, the unit becomes undead (the same rules as those for the Create Undead special ability apply).

Lightning Breath. . . . . Before entering melee combat, the attacker breathes an Armor-Piercing Lightning blast at the opponent (see Armor-Piercing special ability). Units slain by Lightning Breath may not counterattack. The strengths of specific lightning attacks are indicated in **Table J: Summoned Creatures** in the **Appendix**.

Long Range . . . . Long range missile attacks are not penalized by more than one (see **Ranged Attacks**).

Luck . . . . Adds one to all of unit's rolls: attack, defense and resistance (i.e., a plus 10% modifier to hit with each sword, a plus 10% chance to block with each shield, and plus 10% modifier for all resistance checks).

Meld With Nodes . . . . Allows magic and guardian spirits to merge with magic nodes so they can channel the node's magic power to your wizard.

*Might. . . . . Increases melee attack strength (swords) by one per experience level.

Mountaineer . . . . In mountains and hills, only pay one movement point per square for all stacked units.

Natural Healers . . . . . Heal 20% of damage sustained in combat (per game turn) for all units stacked with healer. This healing is in addition to the normal healing that occurs after damage. Does not heal dead or creatures of death units.

Negate First Strike . . . Nullifies attacker's First Strike special ability, but has no effect on breath, thrown or gaze attacks.

*Noble . . . . No upkeep cost. Contributes ten gold pieces per turn to the wizard!

Non-Corporeal . . . . . . All overland movement is one movement point per square. Non-Corporeal creatures can pass through walls and have Stoning and Weapon Immunity.

Pathfinding . . . . For any overland map square, get one movement point per square for all stacked units.

Planar Travel . . . . Unit can move between planes (Arcanus and Myrror) at will.

Poison Attack . . . . . . Defender must resist for each strength unit of the poison attack or suffer one damage per failure. Poison attacks are in addition to melee attacks.

Poison Immunity . . . . Unit unaffected by Poison Attacks.

*Prayer Master . . . . . . Increases all resistance rolls for all units on the battlefield by one (10%) per experience level. Only the best Prayer Master or Resistance to All applies.

Purification . . . . Ability to remove (clean) corruption from a square. Purification requires four turns.

Quiver . . . . The total number of ranged attacks remaining to the unit for the current battle. All ammunition is replaced after each battle. The quiver shows the number of shots (arrows) left for that particular battle.

Regeneration . . . . Unit heals one hit (heart) per combat phase and, immediately after combat, heals completely. If the unit's side is victorious, the unit comes back to life (fully healed) if it was destroyed during combat. If the unit's side lost, the unit stays dead.

Resistance To All . . . . Increases resistance (crosses) of all friendly units in combat by the bonus level of the ability. Only the best Prayer Master or Resistance to All bonus applies.

*Sage . . . . Increases controlling wizard's spell research points by three per experience level.

Scouting . . . . Increases the range a unit can see overland by the ability's level. Flying units normally have a scouting level of two, others have a level of one.

*Spell Caster . . . . Unit can cast spells during combat without drawing on the wizard's reserve. Each level of spell casting gives the hero 5 spell casting skill points (mana "on tap") per experience level. The hero increases the wizard's spell casting skill by one half of his or her own spell casting skill points if on the same square as the enchanted fortress (see **Spell Casting**).

Spell Casting
Ability . . . . Allows a fantastic unit to cast any combat spells within its magic realm (life, death, chaos, nature or sorcery) using the specified total amount of magic power per combat.

Stoning Gaze . . . . Before engaging in melee combat (either offensively or defensively) the adjacent opponent figures must resist or be turned to stone. Figures petrified before combat begins may not counterattack.

Stoning Immunity. . . . Unit is unaffected by petrification: Stoning Gaze, Stoning Touch and Petrify.

Stoning Touch . . . . . . Makes one enemy unit resist or be turned to stone (per creature with Stoning Touch) in addition to other melee attacks. While touch attacks occur during melee combat, their effects are delayed until after melee combat is finished, so petrified units may counterattack.

Teleporting . . . . Unit can move to any free square on the combat map for a cost of two movement points.

Thrown Weapons . . . . Thrown weapons are used before entering a melee attack and are effective against flying units in neighboring squares. Note that thrown attacks are in addition to normal melee attacks. Opponents slain by Thrown Weapons may not counterattack.

Undead Creature . . . . Creatures that are Undead cannot heal by any means. While they gain the benefits of death magic creatures (i.e., Immunity to Cold, Poison and Death Magic), they are also susceptible to spells that target such creatures.

Wall Crusher . . . . Ability to destroy a section of stone wall 50% of the time if unit is adjacent to the target wall section. This probability falls to 25% if the target wall section is attacked at range. Units with this ability melee attack adjacent enemy units across wall sections that they destroy that turn. When conducting ranged attacks, wall crushers also attack an enemy unit that is in the targeted wall square. If the wall is not crushed, the defenders receive the wall's full benefit against the attack. If the wall crumbles, they don't.

Warped Creature . . . . Warped creatures have been either positively changed by Chaos Channels or negatively altered by Warp Creature. Warped creatures are susceptible to all magic that affects chaos magic creatures.

Weapon Immunity . . . Unit nearly unaffected by attacks from normal units that do not have mithril, adamantium, blessed or flaming weapons; unit's defense (shields) increases to 10 (if not already at or above 10); this ability has no effect on attacks from fantastic creatures.

Web . . . . Traps enemy unit. Escape from a web requires breaking the web (doing melee damage to the web equivalent to 12 hits). Creatures that have been trapped by a web may not fly for the remainder of the battle. A unit with this ability may throw a web once per combat.

Artifacts

T he artifacts that you currently have in your possession can be viewed by entering the *items screen* from the *armies screen*. To view an item, right-click on its picture. Artifacts can be used by heroes (artifacts are placed in slots next to the heroes' portraits in the *items screen*) or destroyed (clicking an artifact over the anvil in the *items screen*) to obtain mana (see **Items**).

Artifacts can be acquired in one of several ways: as treasure from creature lairs and ancient ruins, from merchants and by casting the arcane magic spells enchant item or create artifact.

MERCHANTS

From time to time, wandering merchants present you with the opportunity to buy powerful artifacts. If you agree (click on yes), the gold to buy the artifact is taken from your treasury (gold reserve). You are then whisked to the *items screen* (see **Items**) with the new artifact, so that you can give it to the appropriate hero or store it in your fortress vault. Bear in mind that a Charismatic wizard (see **Special Abilities**) gets a significant discount on merchants' goods!

CREATING ARTIFACTS

Once your wizard has learned either the arcane spell *enchant item* or *create artifact*, you can start making unique magical items for your heroes to wear and wield. Note that the difference between these two spells is the strength of the enchantments that can be embedded in the artifact; items made by casting *create artifact* are potentially far more powerful than those created by *enchant item*. (Only enchantments costing 200 mana each (or less) can be placed in an artifact using *enchant item*. *Create artifact* allows enchantments of any cost to be embedded in an item.)

To make an item, cast the spell *enchant item* or *create artifact* (click on the spell name in either spellbook). You then enter the *artifact creation screen*.

You may now choose what kind of item to make. Note that not all items can hold all enchantments (see **Tables L: Non Spell-Specific Artifact Enchantments** and **M: Spell-Specific Artifact Enchantments** in the **Appendix** for details). Appropriate items include weapons (bow, axe, mace, sword, staff or wand), armor (chain mail, plate mail or shield) and miscellaneous items (cloak, gauntlet, helm, orb, pendant or ring).

See the special note about the *Itemmake* utility included with *Master of Magic* on page 150 for information about creating the random artifacts that you find in ruins.
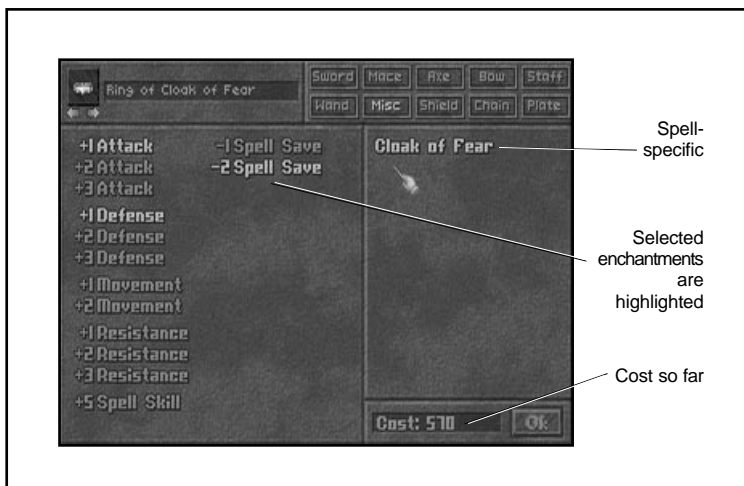
To choose an item, click on the button with the name of the item type and then scroll through the pictures, using the arrows in the upper left corner of the *artifact creation screen* (by clicking) until you are satisfied with the appearance and the type of item. Notice that the item itself (without any enchantments) has a base price in mana, shown in the lower right corner of the screen. If you change the item *after* you have started choosing enchantments to place into a new artifact, any inappropriate enchantments just disappear.

The kinds of enchantments which you can add to your artifact are shown. Select the enchantments you want to place in the item. You may place up to four enchantments in an item. You can remove previously selected enchantments (which appear highlighted) by clicking on them again. Notice that the cost in mana to "cast" or create the item, shown in the bottom right corner of the screen, rises as you add enchantments. *Be aware that offensive and defensive bonuses (increases in attack strength or accuracy and increases in defense ratings) cost twice as much as usual when placed into miscellaneous items as when they are placed into weapons or armor!*

All enchantments embedded in the artifacts are permanent, cannot be dispelled and require no maintenance!

The enchantments that can be placed in an item are of five basic types: non-magical offensive, non-magical defensive, movement, general magic and spell-specific:

- **Non-magical offensive** enchantments include bonuses to hit (at 10% per point) or bonuses to attack strength (swords). These bonuses apply to the hero wielding the artifact.
- **Non-magical defensive** enchantments include bonuses to defense (shields) and bonuses to resistance (crosses). These bonuses add to the hero's defense and resistance values.
- **Movement** enchantments increase the combat and overland speed of the hero wearing the item.

- **General magic** enchantments include:

  a) **Spell Skill** which can raise the hero's spell casting skill by the specified amount.
  b) **Spell Charges** which embed the stated number of combat spells (that can be thrown once per combat turn by the hero wielding the item) into the artifact. Your wizard must already know a combat spell before he or she can embed it into the artifact. The cost of embedding a particular spell is related to the casting cost of the spell.
  c) **Spell Saves** which decrease the target's ability to resist (i.e., their number of crosses decreases by the specified amount) subsequent spells thrown by the wielder of the artifact.

- **Spell-specific** enchantments are those similar or equivalent to spells of the same name.

    Table L: Non Spell-Specific Artifact Enchantments in the **Appendix** shows the enchantments (other than spell-specific ones) that can be placed into different items. The maximum level of the particular enchantment is indicated. All lesser levels of the shown enchantments may also be embedded in the item. For example, if, under the Attack column, you see +6, that means that the item can be enchanted with a +1, +2, +3, +4, +5 or +6 bonus to attack strength (swords). The item then allows its wielder to attack with the chosen attack strength bonus; the increased number in swords also appears on the hero's *unit statistics window*.

    Table M: Spell-Specific Artifact Enchantments in the **Appendix** shows the list of spells that can be embedded into various items. To place a spell in an item, you need to have sufficient knowledge (enough spell books) of the indicated magic realm. The table is divided into the known magic realms so that, for example, all enchantments requiring life magic ranks are placed together. Not all items can hold the listed spells, so the table includes appropriate information to that effect.

    The rule for the spell-specific artifact enchantments is that those spells with defensive properties or that enhance certain attributes endow the wearer of the item with those same properties. Spells that are offensive in nature (i.e., weapons) exert their effects when the wielder attacks opponents. Unless otherwise indicated, an enchantment exerts effects just as a spell of the same name does. Only those spells specifically cited in the table can be placed in the noted artifacts.

    After choosing the enchantments you wish to place into your artifact, you may click on *OK* to start casting the artifact you just designed. The length of time it takes to create ("cast") the artifact depends on how much the artifact costs in mana, the spell casting skill of your wizard and how much mana you are earning per turn. Note that creating very powerful items can get extremely expensive and can take a very long time! Create artifact and enchant item may be stopped as all normal spells are, by clicking on the spell in the wizard's spell book (to access spell book, click on the *spells button* on the *main movement screen*).

Combat and Spell

Casting

Now is the time to focus on the nitty-gritty aspects of becoming Master of Magic. To conquer the worlds, your wizard has to engage in some combat and a lot of spell casting. While you may avoid the details of combat by toggling on the *strategic combat only button* under the game settings (see **Settings**), there is no way to avoid learning some rudimentary spell casting. The following sections should help guide your way through both combat and spell casting in *Master of Magic*.

Combat

Combat begins when your wizard's armies enter an overland square occupied by creatures or enemy troops, or when enemy troops step onto map squares occupied by your units.

Before stepping onto a map square occupied by enemy troops, you may wish to examine those troops. To do so, right-click on the stack of enemy units in the *main movement view*. A *unit list window* appears that describes all of the stacked units in a one-line format. Enemy units use the same statistic icons as your troops. You can see a unit's melee and ranged attack strengths, defense, hit points, speed and movement type (see **Basic Unit Information** and **Table of Basic Movement Types**). If you are planning to invade a neutral or enemy city, you can determine the number and type of enemy troops there by right-clicking on the city square in the *main movement view* (see **Imperialism**). Finally, whenever you move a unit onto a map square that contains creature lairs, uncontrolled magic nodes, and similar structures, you are always given an indication of what opponent to expect in combat if you enter the square. You may then decide whether or not your current stack of units is prepared to meet the challenges ahead—before battle is joined.

Combat unit display

Active window

Spell information window

Attacker's enchantment window

Defender's enchantment window

Active unit window
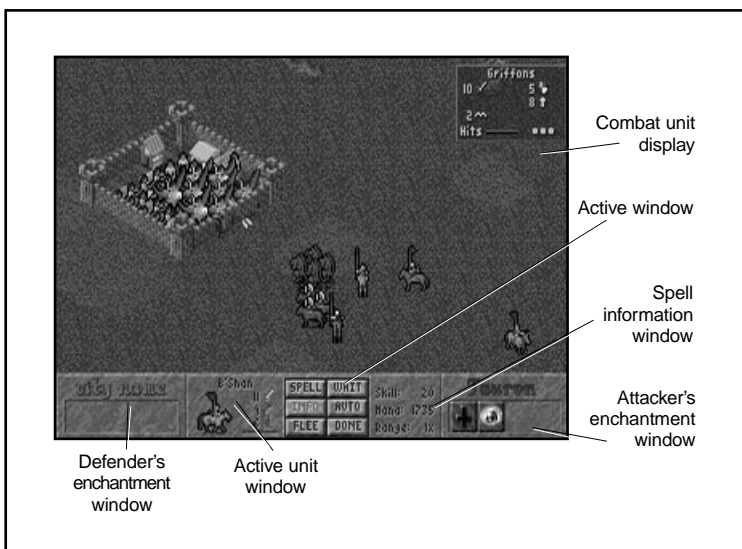
Should you decide to forge ahead (or if an opponent's troops move onto a square occupied by your units), you enter combat.

Combat takes place on an invisible grid, with both armies arranged in a square-like formation on opposite sides of the battlefield. The defender gets to move some or all of his or her units first. The attacker moves next and, from then on, the defender's units and the attacker's units take turns until one side is victorious (having successfully killed all opponents). The only exception to this is if, for some reason, combat is not completed after 50 turns (for each side). In this case, combat ends and the remaining invaders return to the map square they were in before the battle started.

There is one other exception to battle to the death: if you feel your cause is hopeless, you may click the *flee button* to disengage your troops from battle. All of the action (movement, attacks, casting spells, etc.) in the combat screen takes place by clicking on appropriate map squares, units or buttons.

Underneath the combat grid (the battlefield) are two *enchantment windows*: one on the left for the defender (this can be a neutral city, node, enemy wizard, etc.) and one on the right for the attacker. Combat enchantments that are active for either side (such as darkness and true light) are indicated in this window.

Between the two *enchantment windows* are three areas: the *spell information window*, the *action window* and the *active unit window*.

The *spell information window* is devoted to statistical information on your wizard's spell casting abilities for the current combat.

- **Skill** is the total amount of mana that your wizard can use to cast spells for the entire battle.
- **Mana** is how much magic power your wizard has in reserve.
- **Range** is a distance modifier for the cost of casting spells in battles that are far from the wizard's enchanted fortress (see **Spells in Combat**).

The *action window* contains a set of six buttons which can be used to direct actions other than movement and attacking.

- The *spell button* allows you (or spell casting units) to cast spells during combat (see **Spells in Combat**).
- The *info button* provides important information about anything else that may affect the current battle, including overland enchantments (such as Crusade), city enchantments and nodes.
- The *flee button* allows your army to attempt to flee from battle. Fleeing units (except for heroes) have a 50% chance of disbanding in the attempt; heroes are immune to this at the Intro and Easy settings and suffer a 25% chance of death otherwise. Note that defending units that have fled from combat try to enter an unoccupied map square; if they cannot find one, all fleeing units die (including heroes).
- The *auto button* relinquishes control of the battlefield to the computer, which makes all of your units' moves and casting decisions for you.
- The *wait button* cycles to the next unit in your army that can move.
- The *done button* ends a unit's turn. The unit can only be made active during that turn again by clicking on its picture in the combat screen.

The *active unit window* shows information about the currently active unit (a red outline surrounds the active unit's square on the combat grid). Next to the unit's picture are tiny symbols with numbers. These symbols represent melee attack strength (sword symbol), ranged attack strength (with symbols of a bow, fireball or rock for missile weapons, magic ranged weapons and rocks, respectively, depending on the active unit's ranged weapon type) and movement points left (with wings or boots depending on whether the unit flies or not).

In addition, a *damage bar* runs along the bottom edge of the active unit's picture. When this bar is green, the unit has two-thirds or more of its total, full strength (the sum of all the figures' hit points in the unit) hit points left. When this bar is yellow, the unit has between one-third and two-thirds of its hit points left. Finally, if this bar is red, the unit is severely injured and has less than one-third of its hits points left.

A unit can be activated by right-clicking on the three-dimensional picture in the combat grid. Alternately, you can cycle through all friendly units that still have movement points (activating them as you cycle) by clicking on the *wait button*.

Note that as you run the mouse cursor over the map squares of the combat grid, the squares appear outlined in blue. *Squares that are not valid as targets for an active unit's actions show a red "X" when the mouse cursor moves over them.* Valid target squares for actions (attacking or movement) show different symbols (described in the following sections). Right-clicking on friendly or enemy units calls up a *unit statistics window* of the unit (see **Normal Units**).

Finally, if you have toggled on the *additional unit information button* in your *game settings window* (see **Settings**), you have a *combat unit display* open in the upper right corner of the combat screen. This window can be toggled on and off by pressing ⌊L⌋ on the keyboard. The *combat unit display* contains some useful information to have available during battle, including the remaining ammunition (if relevant) of the active unit, mana and health of the "front" figure in the active unit.

MOVEMENT

Each unit may move up to its normal movement point allowance per combat round. An attack requires half of the unit's total movement points, while moving within the battlefield requires one movement point per square for most terrain types. Exceptions to this are shown in the following chart.

To move an active unit (see above section), move the mouse cursor over empty squares on the battlefield until you see that the cursor has the appearance of a small winged boot. Any square over which you see this winged boot is a square to which you can move the currently active unit. To move your unit to a specific map square, click on the destination square.

A unit's turn is over when it has no more movement points left (or when you click on the *done button* in the *action window*).

Combat Movement and Terrain

All terrain not listed in this chart costs one movement point per square.

Terrain	Movement Points Per Square
Cities	$1/2$
Hills	2
Rivers	2
Roads	$1/2$
Rough (Dirt)	2
Tree	2

MELEE ATTACKS

Melee attacks are initiated by moving an active unit into a square adjacent to an enemy unit. Next, click on the enemy unit (the mouse cursor appears as a pair of crossed swords) to attack. The fundamentals of melee attacks and defense are described in the sections **Melee Strength** and **Defense**. Basically, when somebody hits somebody else, the defender gets to poke back, and attack and response are simultaneously resolved. The only exceptions are that breath attacks, gaze attacks, thrown weapons, and units with First Strike (see **Special Unit Abilities**) get to act before regular hand-to-hand combat is initiated. Figures in units or even whole units may die as a result of such attacks—before ever getting a chance to counterattack.

The only melee combat restriction is that the only way nonflying units can melee attack flying units is through the use of breath attacks, gaze attacks, thrown or ranged weapons—from an adjacent square. Normal melee attacks cannot be initiated by nonfliers against fliers. However, once a unit has conducted a breath attack, gaze attack or thrown attack against a flying unit, the flying unit gets angry, descends and forces the attacker to engage in normal melee combat. See **Table N** in the **Appendix**.

Melee Combat Example

During your combat turn, your basilisk unit finds itself starting next to an enemy unit of elven lords with a regular experience level (i.e., they have an extra sword and cross icon to supplement their starting abilities). Note that fantastic (i.e., summoned) units never gain experience. Both the basilisk and the elven lords are completely undamaged; they have no enchantments on them and the battlefield is unenchanted. You are determined to have your basilisk attack those elven lords for all they're worth. After placing the cursor over the elven lords (whom you refer to in a derogatory manner as "Elvis" lords) so that the crossed-swords icon of melee combat appears, you click on them to start melee combat.

Gaze attacks are resolved before regular melee attacks. Since the basilisk has the Stoning Gaze ability, this attack is resolved before the hand-to-hand fighting of the melee attack. Each of the four figures in the elven lords unit must make a saving throw against your Stoning Gaze attack or be turned to stone (eliminated). Elven lords have a fantastic innate resistance ability of 9 (i.e., they are born with nine crosses in their statistics). The basilisk's Stoning Gaze has a minus one save modifier, lowering the elven lords' resistance to eight. Since the elven lords are at regular experience level, though, they gain an extra cross, bringing their total back up to nine. Each cross increases the chance to resist spells and special magic attacks (such as the basilisk's Stoning Gaze) by 10%. With nine crosses, each of the four elven lord figures has a 90% chance to resist the gaze attack. Unfortunately for the elves, one of them fails. Its figure is removed from the unit, and the unit's damage bar turns green and fills to three quarters of its length (to reflect the loss of that figure from the group).

Now both units simultaneously swing at each other in melee combat—meaning that the results of both their efforts against each other are applied concurrently (thus, any figure destroyed in this simultaneous exchange still inflicts whatever damage it can upon the enemy before being removed from play). Let's calculate the basilisk's attack against the remaining three elven lords first.

The basilisk has a melee attack strength of 15 (i.e., it has 15 sword icons on its statistics). Thus, the computer makes 15 die rolls for it, each with a base 30% chance to hit. With a little luck, the basilisk scores 5 hits from among those die rolls. The elven lords, in response, have a defense strength of four each (each figure has four shield icons among its statistics). So, the first elven lord figure steps up to defend against the basilisk's 5 incoming hits. The computer rolls four dice (one for each shield), each with a base 30% to negate a single hit. Unfortunately, it completely misses and all five hits are scored against that elven figure. Since each elven lord figure only has three hits (i.e., three heart symbols on its statistics), it is killed and the two remaining hits are applied against the next elven lord figure. That figure gets to use its full complement of shield icons, making four rolls against the same 30% chance to stop a hit. With better luck than the last figure, it manages to block one hit, and so suffers the other. Thus, after this melee exchange, two elven lord figures remain standing in this unit, the foremost of which has taken a single hit (one of his three heart symbols is darkened).

Before applying these devastating results to the elven lords, however, the computer lets them swing back at the basilisk. Each elven lord has an attack strength (number of sword icons) of six (five for their starting value, +1 for their troop status of "regulars"). Thus, the three figures in the elven lords unit throw a total of 18 attack rolls to score hits on the basilisk. Like all units, elven lords have a base chance to hit with each attack roll of 30%, but elven lords have a special ability, giving them a +2 bonus to hit. This increases their chance to hit by 20% (+10% per bonus point), giving each of their 18 attack rolls a modified chance to hit of 50%.

The results for the elven lords are lucky, and they land 13 hits on the basilisk. For its part, the basilisk has a defense strength (shields) of four. However, since the elven lords also have the special ability of armor piercing, creatures trying to block their hits can only use half of their shields (rounded down). Thus, the basilisk makes its measly two

defense rolls, each with that base 30% chance to stop a single hit. Luckless, the basilisk suffers all 13 blows, reducing its full strength of 30 hits (hearts) down to 17. Now, the losses to both units are applied. The elven lords' damage bar is glowing yellow and slightly less than half full (having lost half its figures and with a hit against one of the remaining ones), while the basilisk's damage bar gleams yellow but noticeably *more* than half full (having 13 damage hits against its 30 total hits).

With half your unit's moves remaining (melee and missile attacks only use one-half of a unit's moves), you again place the crossed-swords cursor over the elven lords, figuring that your wounded basilisk can finish off the two figures that remain standing defiantly against you. Failing your gaze attack against each of the elven lords again—that pesky high 90% resistance roll —melee combat quickly ensues.

Unaffected by injuries to surviving figures (i.e., by any darkened heart symbols on their statistics), both units attack with full vigor. The basilisk throws the same 15 attacks rolls (sword icons), each with the same 30% chance to hit, but scores only three hits this time. The first elven lord (the one with only two of its three hits remaining) rolls its four defense rolls (shield icons), each with a 30% chance to negate one hit, and misses completely. So, two of your three hits are applied to destroy that figure, while the remaining one meets the last elven lord figure's four defense rolls. He manages to block the last hit. The last elven lord figure is undamaged, but his unit's strength bar wanes red, showing only 25% of its full strength hit points remain.

Before suffering those losses, though, the elven lords swing back at the basilisk. They each roll their six attacks, for a total of 12 throws, each with the same 50% chance to hit as before. Luck is still with those swinging elves, for they land another eight hits against your wounded basilisk. With its two defense rolls, the basilisk manages to block a single hit, so another seven hits are applied against it, and seven more of its hearts are darkened. With a total 20 damage, the basilisk now has only 10 hits left, so its strength bar is colored red and filled to one-third of its length. The red nubbin graphically symbolizes the amount of damage your basilisk can still take before dying.

Note that although the elven lords have First Strike ability, it can only be used when elven lords are conducting their own attack against another unit (i.e., during their turn, by expending their own movement points). The First Strike ability does not apply when units with it are defending themselves against another player's melee attack. However, when the elven lords attack the basilisk (as they would next, if our example continued), both the Stoning Gaze and First Strike attacks are conducted simultaneously. Thus, any elven lords that are stoned can still get in a "parting shot" against the basilisk.

Of course, any unit that loses 75% of its strength and three of its four figures might choose to flee rather than to press an attack. A unit that flees has a 50-50 chance of escaping alive to recover darkened hearts and "recruit" new figures until it is full strength once more (see **Unit Size and Healing**).

RANGED ATTACKS

To initiate a ranged attack, the active unit must have a ranged weapon (missile, magic or rocks, indicated in the *active unit window* by a small bow, fireball or rock, respectively, depending on the unit's ranged weapon type) and some ammunition. When the active unit still has ammunition (the *combat unit display* in the upper right corner helps in determining this; see **Combat**), you can click over enemy units to fire at them. The cursor appears as a small bow over valid targets for a ranged attack. Note that flying units may be targeted for ranged attack by nonfliers in adjacent squares. Ranged attacks are resolved in the same way as melee attacks (see **Melee Strength** and **Defense**), but the target unit may not fight back, and there is a reduced chance to hit a target at ranges that exceed two squares.

Most units with ranged weapons have a limited supply of ammunition for their weapons (see **List of All Normal Units** and **Table J: Summoned Creatures** in the **Appendix**). When ammunition runs out, a unit can no longer conduct ranged attacks. Exceptions include many of the rock throwing creatures and spell casting heroes who can "throw" ranged magic attacks at a cost of three mana per attack until they run out of magic power. Note that, unlike other ranged attacks, magic ranged attacks are not stopped by the Weapon Immunity special ability.

Both missile and rock ranged attacks lose power at long ranges unless the unit has the Long Range special ability (see **Special Unit Abilities**). As the distance to a target increases, these ranged attacks suffer penalties to their "to hit" values (losing one "to hit" for every two map squares, starting with the third square away from the firing unit). Note that magic ranged attacks do not suffer from any distance penalty. The effect of distance on a unit's ability to hit at range is shown in the following table.

Distance Penalty for Ranged Attacks

Distance from Attacker to Target	Percent Base Chance to Hit Target
1-2 map squares	30%*
3-4 map squares	20%
5 or more map squares	10%

* The base chance to hit is 30% for all units, so this table shows the distance-dependent penalty for normal units. The chance to hit may be modified by spells or items. For example, a unit with a +1 to hit bonus always has an increased chance to hit of 10% (as long as no other to hit modifiers are operating). This means that the unit has a 40% chance to hit at one to two squares and a 10% chance to hit at five or more squares.

SPELLS IN COMBAT

During a battle, you may cast as many spell-points-worth of spells as your spell casting skill or your remaining mana reserve, whichever is smaller. A wizard may only cast those combat spells that he or she has learned. Some spell casting heroes have their own spell books, giving them access to spells that their controlling wizard does not know.

Spells cast during combat generally cost more than they would if they were cast overland. Because a wizard's power base is situated in his or her enchanted fortress, battles often require a wizard to "channel" magic power for casting spells from this power base to a remote battle location. This channeling process is very wasteful of mana (except for Channelers, see **Special Abilities**), and the farther away the battlefield is from the enchanted fortress, the more expensive casting combat spells becomes. The basic rules are that 1) when battles take place within five map squares of the wizard's enchanted fortress, combat spells do not cost extra, and 2) the maximum a combat spell can cost is three times its normal casting cost. The actual casting cost multiplier for spells cast during the combat is shown in the *spell information window* (see **Combat**) next to the word "Range". Example: A range of 1x (times one) means that you spend no additional mana when casting a combat spell. If the modifier shows a 2x (times two), you reduce the skill number for this battle by the mana cost of the spell, but extract *double* the mana from your mana reserve, due to the distance penalty representing the mana wasted by channeling.

A wizard's spell casting skill limits how much total magic power the wizard can use to cast spells during combat. However, the extra mana that it costs to cast a spell because of the distance of the battlefield from the wizard's fortress *does not count toward that limit* (it is merely charged as a penalty against his or her mana reserves).

To cast spells during combat, click on the *spell button* (see **Casting During Combat**). Note that a wizard can only cast one spell per combat turn. A list of available spells appears. The number of colored symbols below a spell name indicates how many of that particular spell a wizard (or spell casting hero) could conceivably cast during the entire battle. Grayed-out spells cannot be cast.

Selecting some spells causes a window to appear that asks if you wish to add magic power (by clicking on and dragging the nub on the bar); you may then choose how much extra mana you wish to add to the spell, if any. These types of spells have a base strength; by increasing the amount of magic power you channel into the spell, you can make its effect stronger (leaving you with that much less mana available, however, for future battle turns).

Spell casting heroes can use their own mana to cast spells and are not subject to the distance penalty that wizards suffer for spell casting far from their enchanted fortresses. Heroes can cast either their own spells or their wizard's spells. Casting a spell requires all of a hero's remaining movement points for that combat turn (a minimum of one movement point is required for a hero to cast a combat spell). The total amount of mana that a spell casting hero has for the entire battle is equal to the hero's spell casting skill (this number appears on the hero's *unit statistics window* next to the spell casting icon).

Using Artifacts in Combat

The *spell button* also allows heroes to use artifacts in their possession to cast spells. Clicking on this button causes any spells that a hero can cast (because he or she carries artifacts with spell charges) to appear (see **Artifacts**). You may then "cast" an appropriate spell from the artifact.

STRUCTURES INFLUENCING COMBAT

City Walls

City walls prevent all nonflying creatures from entering a city except through the city gates. Ranged attacks can be used on garrisoned units cowering behind the walls, but nonflying defenders gain a +3 bonus to their defense (shields) against such attacks. Flyers cannot really cower as well and are more exposed to ranged attacks, so they only receive a defense bonus of one shield when "behind" a wall.

Units that have the special ability Wall Crusher (see **Special Unit Abilities**) can systematically destroy city walls, allowing attackers greater access to any garrisoned units. In addition, nonflying defenders behind destroyed city wall sections only get a +1 bonus to their defense against *ranged* attacks.

Note that both magic and city walls can exist concurrently. They also have different effects (see **Building Types** and **Spellbook** supplement). Magic walls may not be crushed; they may only be dispelled.

Magic Nodes

Magic nodes can affect combat in one of two ways. They may increase (by one) the attack strengths (swords and ranged weapons), defenses (shields) and resistance (crosses) of all creatures from the same magic realm as the node (i.e., a nature node would exert this positive effect on all creatures of nature such as sprites and basilisks) when these creatures are fighting in any area controlled by the node. An area controlled by a node is the area over which the aura extends when a magic spirit or guardian spirit melds with the node (see **Magic Power and Nodes**). Note that this beneficial effect exists whether a spirit has melded with the node yet or not (i.e., unmelded nodes have "invisible" auras).

Magic nodes can also interfere with magic spells. When combat takes place directly over a node, all magic spells of a different magic type than that of the node stand a significant chance of being dispelled! If dispelled, the spell fizzles, but the mana is still spent in attempting to cast the spell. For example, sorcery magic spells cast during battles over chaos or nature nodes stand a strong chance of failing.

Ocean Combat

Battles that take place over an ocean square can have disastrous consequences. Only flying, sailing and swimming units may actually engage in combat over such squares. Any units that were being carried by a sailing unit (ship) *sink* if that ship is destroyed.

AFTER IT'S OVER

The following sections contain material on the aftermath of battle. In addition to this information, you can find material on how undead creatures come into being in **Special Unit Abilities**, as the forming of these creatures is one potential consequence of battles involving creatures of death.

Treasure

Artifacts may be picked up from heroes killed in battle (unless the heroes died through some mechanism that completely destroyed or banished them including *disintegration, banishment, unsummoning* and *holy word*). There are also sites, such as ancient ruins and towers of wizardry that can yield special treasures—even new spell picks. Finally, when enemy cities are conquered, the conquering wizard gets a portion of the previous owner's gold reserve as loot.

City Damage

When cities are invaded, there is a small chance that townsfolk and buildings will be destroyed, even if the attack is repelled. The total amount of death and destruction depends on how long the city is occupied (i.e., how long the battle takes). Far greater losses to citizens and buildings are suffered, however, when a city is conquered by an enemy. City buildings and citizens are especially likely to be lost if the attacker actually conducts combat within the city (as represented by a cluster of buildings on map squares during combat) itself—rather than engaging the enemy outside city walls.

Enchanted Fortress

When a wizard's enchanted fortress is captured by another wizard, the conqueror steals 50% of his opponent's mana reserves, and the losing wizard is banished from the worlds of Arcanus and Myrror. Vanquished wizards must cast the arcane *spell of returning* (casting cost is 1000 mana) to reappear in another city. If the wizard has no other city, he or she cannot return. While banished, a wizard earns no mana whatsoever, but he or she must still pay upkeep costs for continuous enchantments and fantastic creatures, if he wishes to keep them. Normal troops and remaining cities continue to function as usual, producing food and gold, etc., in preparation for their wizard's return. If the banished wizard fails to return, all his or her cities revert to neutral control, all spells collapse, and all fantastic creatures return to their natural magic realms. Note, however, that the conquering wizard suffers permanent diplomatic penalties to his or her interactions with other wizards after such an event.

Healing

Damaged units heal at a rate of 5% of their total hit points (which includes hit point bonuses from magic items and enchantments) every game turn. While on a city square, units heal at a 10% per turn rate and, if that city has an animist's guild, this rises to 15%. Additionally, when units are stacked with one or more units that are Natural Healers (see **Special Unit Abilities**), add another 20% to the healing rate for those units (i.e., this gives them a range from 25% in most squares, to 30% in cities, to 35% in cities with an animist's guild). Only creatures of death (all death magic creatures and the undead) cannot heal at all (unless they have Regeneration or Life-stealing Attacks).

Spells and Spell Casting

he following sections describe the basic elements of spell casting in *Master of Magic*. A list describing all of the spells in the game is included for easy reference in the separate **Spellbook** supplement.

TYPES OF MAGIC

The different types of magic (arcane, life, death, chaos, nature and sorcery) are discussed in great detail in the earlier **Choosing a Wizard** and **Spell Ranks**. For specific information, the **Spellbook** supplement describes all of the available spells in each category. In addition, tables of spells by magic type and effect type allow easy cross-referencing.

RARITY OF SPELLS

Some spells are more rare than others. Spells can be common, uncommon, rare and very rare. In general, the rarer spells are more powerful, harder to research and cost more to cast and maintain than the less rare spells.

RESEARCHING

A wizard generally learns new spells by researching them. The spells you can research are those in your spell library. The contents of a spell library depend on the number and types of spell ranks ("books") that you chose for that wizard before starting the game. At any point in the game, your wizard can have up to eight different spells available for research. At the beginning of the game and after completing research on a new spell, you are asked to choose a new spell to research. The estimated length of time (in turns) to complete research of this new spell will be indicated next to the spell. To choose a spell to learn, click on the spell.

If you wish to remind yourself which spell you are currently researching, you can go to the *magic summary screen* (click on the *magic button* on the *main movement screen*) or go to the last pages of your complete spell book held by the Apprentice advisor (*info button* on the *main movement screen*) where the current spell is printed in glowing letters.

Note that you can only research spells (from your spell library) of greater degrees of rarity within a particular magic type once you have learned (or are able to learn) all of the more common spells of that magic type that are in your spell library. For example, if you chose one spell rank in Sorcery magic at the beginning of the game, your spell library contains three common Sorcery spells and one uncommon Sorcery spell. The uncommon spell only appears in your "Research Spells" pages after the three common spells appear. You needn't have finished learning all three commons.

The amount of time a new spell takes to learn appears next to the spell title on your list of available spells. You can see how much time remains in your current research phase by consulting with the Apprentice. Note that the length of time it takes to learn a new spell depends on both the research cost of the spell and on how much magic

power you are funneling into spell research every turn (use your *magic summary screen* to adjust this). More powerful and rarer spells generally have higher research costs.

The research cost of a spell is constant and related to the rarity of the spell. Common spells may cost anywhere from 20 to 250 research points, depending on the spell; uncommon spells can cost from 300 to 800 research points; rare spells cost between 880 and 1700 research points. Finally, all very rare spells other than spell of mastery cost between 1850 and 6000 research points. Research costs can be paid using magic power drawn from magic nodes and other sources of mana. They can also be paid by research points collected from institutes of learning, such as libraries and universities (see **Table G: Building Types** in the **Appendix** and **Spell Research**).

The game-ending spell of mastery (see **Winning or Losing**), has a unique research cost. The base cost of this spell is 60,000 research points, but your wizard can subtract from this number *all* of the research points he has spent learning other spells over the course of the game. You can only count the spells that you have actually learned, not the ones on the "Research Spells" pages of your spellbook. If your wizard chose to specialize and put more than eight spellbooks into any one magic realm, you are credited with the base cost of each spell, not merely the reduced rate that you actually paid (see **Spell Ranks**).

SPELL CASTING

To cast spells either overland or during combat, you must first get to your spellbooks. For overland spells, click on the *main movement screen's spells button*; during combat, click on the *spell button*.

After you open your spellbook, all spells available for casting appear. You can turn the pages of the spellbook by clicking on the upper corners of the pages.

Below each spell, you can see symbols that indicate the magic type of the spell (white ankh for life magic, purple skull for death, red fireball for chaos, green tree for nature and blue diamond for sorcery magic). The number of symbols under the spell indicates the number of turns it takes to cast the spell if you are casting overland. The number of symbols also indicates the number of times you can cast the spell if you are casting during combat.

Choose a spell to cast by left-clicking on the spell name. Right-clicking on a spell calls up its description.

Outside of combat, spells that are currently being cast appear in glowing letters with the number of symbols below them equivalent to the number of turns left before casting is complete.

During overland casting, click on a spell to abort the casting effort. Note that all magic power already spent on the spell is permanently lost. Clicking on a new spell also aborts the old spell, but chooses a new spell to start casting. In this case, all the magic power already gathered to cast the old spell is funneled into casting the new one; excess mana (if there is any) is lost.

To abort a combat spell, left-click on the *cancel button* that appears in the bottom right corner of the screen before choosing a target. Note that you can only abort combat spells that have unique targets.

Spells cannot be cast without magic power, and the amount of magic power required to cast a spell is called its casting cost. During overland casting, the number of symbols under a spell's name signifies the estimated number of game turns required to complete casting the spell (under current conditions); during combat, the number of symbols signifies how many times that spell can be cast during the battle, given the number of remaining spell casting skill points or the amount of mana left in the reserve.

When casting spells overland or during combat, the amount of mana you have to work with (per game turn for gathering enough magic power to cast a non-combat spell and per battle for combat) is equivalent to your spell casting skill.

There are a few, mostly combat, spells that can be made stronger by spending more magic power when casting them. These spells can take an input of up to five times the base cost of the spell (limited by available mana reserves or spell casting skill). When you cast a spell of this type, a window appears in which you can choose how much magic power to add to the spell (to increase the spell's strength). Click on and then drag the nub in the window to choose the amount of additional mana, if any, to put into the spell.

Click on the red ribbon at the bottom of your spellbook to close it.

Casting Overland

Your spellbook only shows you the spells it is possible to cast overland (i.e., not in combat) when you click on the *spells button* of the *main movement screen*. Click on spell page corners to turn the spellbook pages, and select your choice for casting by clicking on the spell's name. You may, however, only cast one overland spell at a time.

When casting overland spells, you may take as many turns as you need to complete the spell. The total amount of mana you can put into a spell every turn depends on your spell casting skill (*magic summary screen*) and the amount of mana in your mana reserves. Once you have spent an amount of magic power equal to its casting cost, the spell is cast.

Spell casting heroes may help you cast overland spells. At the end of every turn in which such a hero remains in your enchanted fortress city, half of his or her spell casting skill is added to that of your wizard. This allows your wizard to cast overland spells at a faster rate, because more mana can be contributed to the casting per turn. The mana itself, however, still comes from your wizard's sources (the hero's mana is only accessible during combat; see **Casting During Combat**).

Casting During Combat

When attempting to cast a spell during combat by selecting the *spell button,* you may be asked to choose which spellbook to use. This choice decides who is actually casting the spell, your wizard or an active hero on the battlefield (assuming that hero has some spell casting ability). When there is no spell casting hero at the battle *or* if such a hero is not presently the active unit, you only get to use your own spellbook.

Every combat allows you to spend up to your spell casting skill in magic power to influence the battle. This magic power is drawn directly from your mana reserves and, therefore, the size of your mana reserves may limit the amount of magic power you can spend during a battle (if your mana reserves have less magic power than you can theoretically use, based on your spell casting skill).

In addition to your wizard's ability to cast spells during each battle turn, heroes with magic abilities can also cast spells each battle turn when they are the active unit. (Your wizard can cast spells when any unit is active). Such heroes start every combat with an amount of mana equal to their spell casting skill level. Some heroes also have their own spellbooks with special spells (in addition to those in their controlling wizard's spellbook) from which they can choose combat spells to cast.

The heroes' own mana can also be used to make regular ranged magic attacks, at a cost of three mana per attack.

See the information under **Spells in Combat** for more details.

SPELL TYPES AND DURATIONS

Spells come in one of three basic types: *instant spells, enchantments* and *creature summonings*. The following sections briefly describe each of these spell types.

Instant

Instant spells have effects that take place immediately upon casting the spell. Instant spells cannot be dispelled, they can only be prevented. These spells come in one of two types: combat and overland. Instant combat spells may only be cast during combat, while instant overland spells can only be cast outside of combat. Note that *global spells,* whether instant or not, affect all relevant targets on *both* Arcanus and Myrror.

Enchantments and Continuous Spells

Enchantments are spells that can alter or affect creatures, items, spells, battles, cities and the land. Global enchantments affect all relevant targets on both Arcanus and Myrror; other kinds of enchantments affect their specified targets. Enchantments last much longer than instant spells, and the duration of their effects depends on the type of enchantment—or the length of time the caster is willing to pay its maintenance cost. When casting enchantments, click on the appropriate target. This may be a city, map square or creature. Creatures as targets for overland (continuous) enchantments can be chosen by first clicking on the square they are occupying and then clicking on the specific target unit from the list of those available.

- **Combat** enchantments last only for the duration of combat.
- **Continuous** enchantments are cast overland and generally require upkeep costs. Most city and global enchantments are continuous.
- **Combat and Continuous** enchantments can be cast either during combat or overland. These spells basically have two forms (each with its own casting cost and with the continuous version requiring upkeep costs). The combat version only lasts for the duration of combat, while the continuous version, cast overland, lasts as long as the caster is willing to maintain the spell. Note that enchantments on creatures appear as a "glow" around the creature in the color of the magic realm.
- **Permanent** enchantments permanently alter the target and may not be dispelled or removed in any other way.

Creature Summoning

Wizards can cast spells that summon magic creatures from other realms to the worlds of Arcanus and Myrror. These magic creatures are bound to that wizard's will and fight for the wizard during their stay. While most creature summonings are cast overland, the summoning of Elementals, Phantom Warriors and Phantom Beasts can only be performed during combat. Such creatures (summoned during combat) only last for the duration of the battle and disappear when combat ends. Creatures may only be summoned during combat if there are fewer than nine units fighting for the wizard. Note that, when combat takes place over ocean squares, combat summonings can only call forth flying creatures.

MAINTAINING SPELLS

Continuous spells, including most summoned creatures, require an upkeep cost in magic power. Every turn all upkeep costs for city, creature and overland enchantments and summoned creatures must be paid, or enchantments and creatures start disappearing. Enchantments disappear first, followed in short order by creatures.

Note that upkeep costs are first taken from the amount of magic power earned per turn. Once your costs exceed this "income," upkeep costs are paid from existing mana reserves. Creatures and enchantments do not start disappearing until your mana reserves are empty.

To decrease your maintenance costs, you may decide for yourself which creatures to dismiss (right-click on creature pictures to bring up their *unit statistics window* and then click on the *dismiss button*) or which enchantments to eliminate (click on the names of enchantment spells in screens in which they are indicated, such as the *city screen* or *unit statistics window*, to remove them).

RESISTANCE TO SPELLS

All units and creatures have some inherent resistance to magic and poison (as symbolized by the number of crosses they have on their *unit statistics window*). This base resistance is a 4 unless another value is indicated. Modifiers to resistance (spells and special unit abilities) influence the final result when creatures have to resist magic attacks or spells. Whenever a creature is magically attacked, it makes a resistance

roll of 1 to 10. The roll is compared to the creature's modified (if applicable) resistance. Rolls lower than or equal to the creature's modified resistance indicate that the creature emerges unscathed from the magic attack (i.e., each cross is a 10% chance to resist).

DISPELLING

Spells have an inherent resistance to being dispelled that is related to the amount of magic power used to cast the spell. The chance that a spell can be dispelled by casting *dispel magic* or other spells of that type is given by the ratio of the casting cost of the "dispelling" spell divided by the sum of the casting costs of the target spell and the "dispelling" spell.

$$\text{Chance of Dispelling} = \frac{\text{Casting Cost of Dispel}}{\text{(Casting Cost of Target + Casting Cost of Dispel)}}$$

For example, if you want to remove a *weakness* enchantment that has been cast on one of your units during combat, you may decide to cast *dispel magic*. The *dispel magic* spell has a base casting cost of 10 mana. You can add more mana to the spell (up to five times the base cost) to strengthen it. Let us say that you end up putting an extra 10 mana into the spell, giving it a total strength of 20 mana. The target spell, *weakness*, has a casting cost of five mana. Therefore, the chance of dispelling this enchantment with a 20 strength *dispel magic* is 20 divided by 20 +5 or 20/25. There is, then, a four in five chance of dispelling the *weakness* enchantment from your unit.

In general, because continuous spells cost more magic power, they are significantly more difficult to dispel than other spells. Also, a number of the wizard Special Abilities can make it more difficult to dispel spells they have cast (see **Special Abilities**).

Events

In real life, things are rarely quiet for long. Life on Arcanus and Myrror is no different from life on Earth in that respect. The following list briefly describes the sorts of interesting events that can keep things from getting too routine. (Although, if you are not really in the mood for much excitement, feel free to toggle off the *random events button;* see **Game Settings**.)

Every year brings with it a certain chance that an unusual event will occur. As years without events pass, the probability of a random event occurring increases. If your wizard is doing well (winning), there is an increased chance that a negative event will occur, while the opposite holds true if your wizard is losing.

All events are announced to you as they occur. If the particular event is a lasting one, you are also notified when it ends.

Bad Moon: A blood red, evil moon appears in the night skies of Arcanus and Myrror, increasing the magic power that flows from evil temples, those owned by practitioners of death magic, by 50%. At the same time, the magic power flowing from good temples, those owned by practitioners of life magic, decreases to half its usual amount. There is a 5% probability of the event ending every game turn.

Conjunction: The skies over Arcanus and Myrror occasionally exhibit an unusual phenomenon: triads of stars of similar color (red, blue or green) appear to rise in the skies. When they do, the dominant color of the stars in the triad mysteriously influences the magic nodes on the worlds, doubling the magic power obtained from nodes of the same color as the stars and halving the magic power emanating from all other nodes. There is a 5% probability every game turn that this phenomenon ends.

Depletion: Occasionally deposits of minerals are depleted. When this happens, the mineral disappears from the land, never again to contribute to the local town's resources.

Diplomatic Marriage: The ruler of a neutral city appears, bearing an offer for unity through a diplomatic marriage. If you agree, the neutral city becomes yours.

Disjunction: On rare occasions, a massive flux of energy from an as-yet- unidentified source tears asunder the fabric of magic itself! Well, it need hardly be said that the consequences of this event are disastrous, as wizards see all their hard-placed global enchantments destroyed along with the woven threads of magic.

Donation: A generous and wealthy merchant decides to donate a large amount of gold to a wizard.

Earthquake: While most of the earthquakes on Arcanus and Myrror are due to wizardly feuds, the odd earthquake occasionally happens naturally, with effects transpiring in the same manner as the spell (see earthquake in the **Spellbook** supplement).

The Gift: A god offers a powerful ancient relic to a wizard.

Good Moon: A pure silver moon appears in the night skies of Arcanus and Myrror, increasing the magic power that flows from good temples by 50%. At the same time, the magic power flowing from evil temples decreases to half its usual amount. There is a 5% probability every game turn of ending the event.

Great Meteor: An enormous meteor strikes a city, with consequences like those following the casting of call the void (see the **Spellbook** supplement).

Mana Short: All sources of magic power dry up completely. No player can draw magic power from any source during a mana short. Note that enchantments and fantastic creatures that require mana for maintenance still require it during a mana short! Take care that you spend the magic power from your reserves carefully during this event. Every turn there is a 5% probability that the event ends.

New Minerals: A new mineral source is discovered near a city. Potential new minerals include coal, gold, gems, mithril, adamantium and quork crystals.

Piracy: Pirates stage a raid and make off with between 30% and 50% of a wizard's gold reserves!

Plague: A virulent plague breaks out in a city, causing a loss of lives and increasing local unrest. The effects are the same as the spell *pestilence* (see the **Spellbook** supplement), except that a plague cannot be dispelled. There is a 5% probability of the plague ending every game turn.

Population Boom: The population growth rate of a city doubles. There is a 5% probability every game turn that the growth rate returns to normal.

Rebellion: Your local popularity in one of the cities you own plummets. Rebels seize power and the city, along with any military units there, becomes neutral. All fantastic creatures in the city are banished.

Winning or Losing

There are two ways of winning *Master of Magic*. You can take a more aggressive approach and destroy all opposing wizards, or you can take a more scholarly approach, diligently studying the magic arts until you can cast spell of mastery.

To destroy an enemy wizard, you must banish him or her from both Arcanus and Myrror — permanently. Capturing a wizard's enchanted fortress banishes him or her at least temporarily, depending on the vanquished wizard's level of mana reserves, but to be certain of defeat, you must eliminate your opponent's remaining cities as well. Once a wizard is permanently banished, any fantastic creatures and enchantments he or she controlled disappear; and his or her former cities become neutral. Military units left stranded outside of the banished wizard's cities disband or die.

If your enchanted fortress is captured by another wizard's troops, you are banished from Arcanus and Myrror (and must cast the arcane spell of returning, casting cost 100 mana, to reappear). While you are banished, you do not earn mana from any source, though you can still convert it through Alchemy. In addition you cannot cast any Spells in combat, though you may still direct the activities of cities and troops under your control (see **Enchanted Fortress**). If you haven't got the mana, and can't use alchemy to get it from your gold reserves, you lose the game. Of course if, instead, you permanently banish the last opposing wizard, you become the sole wielder of magic power in both worlds, and thereby, the Master of Magic.

As an alternative to destroying all other wizards, any wizard may win the game by successfully casting the arcane spell of mastery. This spell is extremely rare, difficult to learn and expensive to cast. While you or any other wizard tries to cast this spell, your fortress glows and flares red from the enormous strain of gathering the necessary magic power. Everyone else on both worlds, therefore, becomes aware of what is going on. (You might as well post a sign saying "Kill me now, I'm about to win.")

Since a successful casting of spell of mastery banishes everyone except for the casting wizard, all other wizards immediately declare war on the caster to stop this event. Even those who were once allies turn against the wizard and attack. It is, after all, not in their interests to let this spell be cast by anyone but themselves.

When spell of mastery is successfully cast by a wizard (hopefully you), all other wizards are immediately banished from Arcanus and Myrror. Their enchantments disappear; their fantastic creatures return to the magic realms from which they came. The casting wizard is left to rule the worlds as the Master of Magic.

Appendix
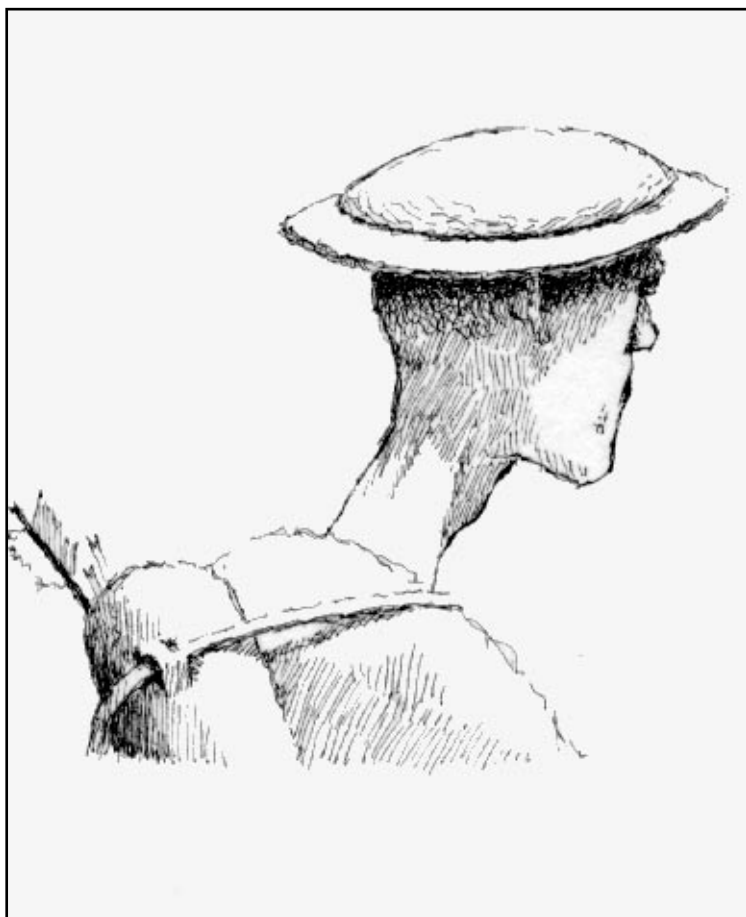
SPELL RANKS

Number of Spell Books	Total Common Spells	Total Uncommon Spells	Total Rare Spells	Total Very Rare Spells	Number and Type of Guaranteed Spells
1	3	1	none	none	none
2	5	2	1	none	1 common
3	6	3	2	1	2 common
4	7	4	3	2	2 com. + 1 uncom.
5	8	5	4	3	2 com. + 2 uncom.
6	9	6	5	4	2 com. + 2 uncom. + 1 rare
7	10	8	6	5	2 uncom. + 1 rare + 1 very rare
8	10	10	7	6	1 rare + 1 very rare + 10% reduction*
9	10	10	9	7	1 rare + 1 very rare + 20% reduction*
10	10	10	10	10	30% reduction*
11	10	10	10	10	2 com. + 1 uncom. + 1 rare** + 40% reduction*

TABLE A

* At higher levels (i.e., when you choose a greater number of "books") in a particular spell category, a wizard gains expertise in researching and casting spells. This translates to a reduction in the researching and casting costs of spells of the category in which your wizard has eight or more spell books.

** A spell rank of eleven in a magic type allows you to pick two common, one uncommon and one rare spell with which to start the game. These spells require no researching to learn; they automatically appear in your wizard's spell book. While this is pretty nice, it completely commits you to that one color of magic and leaves you no points with which to acquire any special abilities.

RACE COMPARISON

Race	Racial Special Abilities or Characteristics for Standard Units	Race-Specific Units	Standard Units*	Building Restrictions: Cannot Build
Barbarians	*Cavalry, spearmen and swordsmen cost 150% of normal;* +1 resistance bonus; Cavalry, spearmen and swordsmen carry axes and spears for a thrown attack strength of 1	Beserkers Warships	Bowmen Cavalry Catapults Galleys Shaman Spearmen	Animist's Guild Cathedral University
Beastmen	*Bowmen, settlers, spearmen and halberdiers cost double;* *Engineers, magicians and priests cost 150% normal;* +1 hit points; +1 resistance bonus; +1 melee strength bonus	Centaurs Manticores Minotaurs	Bowmen Catapults Engineers Galleys Halberdiers Magicians Priests Spearmen	Fantastic Stable Shipyard War College
Dark Elves	*Cost 250% normal except for priests who cost double;* +3 resistance bonus; Priests have a strength 6 magic attack; Cavalry, halberdiers, spearmen and swordsmen have a ranged magic attack of strength 1 with 4 shots	Nightblades Nightmares Warlocks	Cavalry Catapults Galleys Halberdiers Priests Spearmen	Cathedral

TABLE B

Draconians	*Cost 250% of normal except for bowmen, magicians and shamans who cost 50% more than normal and catapults that cost normal amount;* +1 Defense bonus; +2 Resistance Flying (except settlers); Fiery Breath attack of strength 1 for all units without a normal ranged attack	Air Ships Doom Drakes	Bowmen Halberdiers Magicians Shaman Spearmen	Animist's Guild Miner's Guild
Dwarves	*Cost 250% of normal amount except for engineers and triremes;* 3 hit points; Double bonuses from special mines; Produce 50% more than normal; Mountaineer; +4 resistance bonus Engineers build at twice normal speed	Golems Hammerhands Steam Cannons	Engineers Halberdiers	Parthenon Shipyard Stable University
Gnolls	*Cost 50% more;* +2 melee strength bonus; Halberdiers negate First Strike	Wolf Riders	Bowmen Cavalry Catapults Galleys Halberdiers Spearmen	Animist's Guild Library Parthenon
Halflings	*-1 attack strength penalty (minimum of 1);* +1 defense bonus; Lucky; +2 resistance bonus; Swordsmen units have 8 figures	Slingers	Bowmen Shaman Spearmen	Armorer's Guild Stable University

Race	Racial Special Abilities or Characteristics for Standard Units	Race-Specific Units	Standard Units*	Building Restrictions: Cannot Build
High Elves	*Cost 50% more except for catapults, galleys and triremes;* +1 bonus to hit; Forester; +2 resistance bonus	Elven Lords Longbowmen Pegasi	Cavalry Catapults Galleys Halberdiers Magicians Spearmen	Parthenon
High Men	none	Paladins Pikemen Warships	Bowmen Cavalry Catapults Engineers Galleys Magicians Priests Spearmen	Fantastic Stable
Klackons	*Cost double normal amount;* Produce 50% more than normal; +1 resistance bonus; Halberdiers, spearmen, and swordsmen have +2 defense bonus; If wizard's fortress is klackon city, reduces unrest by 2	Stag Beetles	Engineers Halberdiers Spearmen	Sage's Guild Shipyard Temple
Lizardmen	*Cost double normal amount (except standard units);* Swimming; +1 defense bonus; 2 hit points	Dragon Turtles	Halberdiers Javelineers Settlers Shaman Spearmen	Animist's Guild Armorer's Guild Miner's Guild Parthenon Sage's Guild

				Sawmill Ship Wright's Guild
Nomads	none	Griffins Horsebowmen Pikemen Rangers	Bowmen Catapults Galleys Magicians Priests Spearmen	Maritime Guild Wizard's Guild
Orcs	none	Wyvern Riders	Bowmen Cavalry Catapults Engineers Galleys Halberdiers Magicians Priests Spearmen	none
Trolls	*Cost triple normal amount* Regeneration; 4 hit points; +2 melee strength bonus; +3 resistance bonus; Halberdiers negate First Strike Have 4 figures per unit	War Trolls War Mammoths	Halberdiers Shaman Spearmen	Fantastic Stable Miner's Guild Sage's Guild Shipyard University

Italics indicate that these are negative features associated with the race.

* All races have settlers, swordsmen and triremes as standard units in addition to those listed, and that all units have 1 hit point per figure except for units made of beastmen, dwarves, lizardmen and trolls.

BASIC MOVEMENT TYPES

MOVEMENT MODE	GRAPHIC REPRESENTATION	ALLOWED MOVEMENT
Flying	Pair of wings	1/2 MP/square for all terrain Flying usually allows 3 MP/turn
Forester	Green tree	All stacked units get 1 MP/square in forest
Mountaineer	Hill	All stacked units get 1 MP/square in hills and mountains
Pathfinding	Eye	All stacked units get 1 MP/square for all land-based terrain
Planar Travel	Disappearing figure	Allows movement between planes without regard to location (i.e., unit does not have to be in tower of wizardry, etc.) Note: This movement option is negated if Planar Seal has been cast
Sailing	Sail	Can only move over water 1 MP/ocean square All stacked units move at Sailing speed
Swimming	Waves	Can move over oceans and rivers for 1 MP/square
Wind Walking	Cloud	All stacked units get 6 MP/turn and can fly

TABLE C

MP represents movement points and the phrase "All stacked units get" indicates that all units moving in a stack with a unit that has the indicated movement type enjoy its movement bonus.

TERRAIN TYPES

TERRAIN	MPS	FOOD	GOLD	PRODUCTION	NOTES
Desert	2	0	0	+ 10%	may contain quork and crysx crystals
Forest	2	0.5	0	+ 5%	required for sawmill and forester's guild
Grasslands	1	1.5	0		
Hills	2	0.5	0	+ 5%	may contain iron, silver, gold or mithril
Mountain	3	0	0	+10%	may contain iron, silver, gold, gems, mithril or adamantium
Ocean	1	0.5	+10%*		only ships, swimmers and flyers may cross; required for shipyard
River	2	2	+20%/+30%*		
Shores	1	0	+10%*		
Swamp	3	0.5			may contain nightshade
Tundra	2	0			

* When a city is built on a coast, gold production runs 10% over normal. When a city is built on a river, the gold production is 20% above normal. If the city square is both on the coast and on a river (at the mouth of a river), the city's gold production is 30% over its base production.

MP means movement points to enter the indicated terrain type.

TABLE D

TERRAIN SPECIALS (MINERALS, BIOTA, NODES AND STRUCTURES)

TERRAIN SPECIAL	MILITARY UNIT COSTS	GOLD	MAGIC POWER	SPECIAL EFFECTS AND RESTRICTIONS
Adamantium			+ 2	If city has an alchemist's guild, *all* new units get magical adamantium weapons with +2 attack strength and defense bonuses; adamantium is only found in mountains on Myrror
Ancient Ruins				Monster lair**
Ancient Temples				Monster lair**
Chaos Nodes			***	Look like volcanoes**
Coal	- 10%*			
Crysx Crystals			+ 5	Only found in deserts on Myrror
Gems		+ 5		
Gold Ore		+ 3		
Iron Ore	- 5%*			
Mithril Ore			+ 1	If city has an alchemist's guild, *all* new units get magical mithril weapons with +1 attack strength and defense bonuses; mithril is found in hills and mountains

Nature Nodes			***	Look like green and white glowing squares**
Nightshade				Cities with shrines, sage's guilds or animist's guilds (or their replacement buildings) use nightshade to automatically cast *dispel magic* against all city enchantments and global spells directed against the city every turn; each nightshade has a separate chance to dispel negative enchantments every turn
Quork Crystals			+3	Only found in deserts
Roads		****		Movement along roads for nonflying units is 1/2 movement point per square; Note that *all* roads on Myrror are enchanted and require no movement points per square
Silver Ore		+2		
Sorcery Nodes			***	Look like radiant blue pools**
Towers of Wizardry				Allow *planar travel* for all units in the tower (use the *plane button* to shift planes) **
Underground Lairs				Monster lair**
Wild Game				+ 2 Food (both to total and to maximum production)

* Applies only to normal units except for magicians, priests, shamans and warlocks. The bonus is cumulative for multiple iron ore and coal deposits up to a maximum reduction in cost of 50%. Does *not* affect costs of buildings.

** First time capture of these structures generally requires fighting guardian creatures and yields treasures! Treasures include artifacts, gold, imprisoned heroes, magic power (found as mana crystals), maps, spell picks (as if you had chosen an extra rank or special ability when creating your wizard) and spells. For towers of wizardry, one of the treasures is always a spell.

*** Magic power from nodes can only be harnessed by guardian or magic spirits that meld with the nodes. Once a node has been captured, the magical area around the node shows an aura of the controlling wizard's banner-color.

**** Roads increase a city's income through trade with adjoining towns. A city earns an additional 1% of its normal gold production per person (i.e., per population figure in the *city screen*) in the city with which it is joined by a road to a maximum of 3% per townsperson in the city. That is, if a town connected to a large city earns more in trade than one connected to a tiny hamlet. The percentage earned is 0.5% if the towns joined by the road are both occupied by the same race. Note that, as long as there is *any path* connecting two towns that does not require passing through another city, there will be trade between the joined towns.

ROAD BUILDING

TERRAIN TYPE OR SPECIAL	TURNS TO BUILD
Chaos Node	5
Desert	4
Forest	6
Grassland	3
Hills	6
Mountain	8
Nature Node	4
River	5
Sorcery Node	3
Swamp	8
Tundra	6
Volcano	6

Note that roads may not be built over ocean squares.

BUILDING TYPES

BUILDING TYPE	COST OF PRODUCTION / UPKEEP	REQUIRES:	ALLOWS BUILDING:	ALLOWS TROOPS	EFFECTS
Alchemist's Guild	250/3	Sage's Guild	Wizard's Guild		+ 3 mana; All new troops get + 1 to hit, magic weapons
Animist's Guild[2]	300/5	Stables Temple	Fantastic Stable	Manticores Rangers	Food harvest + 1; unrest -1 Enhances healing rates, garrisoned troops and allows use of nightshade
Armorer's Guild	350/4	Fighter's Guild	Fantastic Stable War College	Elven Lords Golems Minotaurs Paladins Stag Beetles	
Armory	80/2	Barracks Smithy	Fighter's Guild Maritime Guild	Halberdiers Slingers	
Bank	250/3	Marketplace University	Merchant's Guild		Gold + 50%; Revenue increase is over that provided by a marketplace

TABLE G

Barracks	30/1		Armory	Allows you to build other military units, except for Spearmen, Engineers, Magicians, Warlocks, Shaman, Priests, Triremes, Galleys and Warships.	See note below[3]
Builder's Hall	60/1		City Walls Granary Library Miner's Guild Shrine	Engineers	
Cathedral	800/4	Parthenon		Paladins	+ 4 mana; Decreases unrest by 1
City Walls	150/2	Builder's Hall			Detect enemy units up to 3 squares away
Fantastic Stable	600/6	Animist's Guild Armorer's Guild Stable		Griffins Nightmares Pegasi Wyvern Riders	
Farmer's Market	100/2	Granary Marketplace			+3 food; + 30 people per turn

BUILDING TYPE	COST OF PRODUCTION / UPKEEP	REQUIRES:	ALLOWS BUILDING:	ALLOWS TROOPS	EFFECTS
Fighter's Guild	200/3	Armory	Armorer's Guild	Beserker Hammerhands Javelineers Nightblade Pikemen War Trolls	All new troops start at the Regular experience level
Forester's Guild	200/2	Sawmill			food harvest + 2; 25% production
Granary	40/1	Builder's Hall	Farmer's Market		+2 food harvest; +20 people per turn
Housing					See note below[4]
Library	60/1	Builder's Hall	Sage's Guild		+ 2 research points
Maritime Guild	400/4	Armory Shipyard		Warships	
Marketplace	100/1	Smithy	Bank; Farmer's Market		+ 50% gold
Mechanician's Guild	600/5	Miner's Guild University		Catapults	+ 50% production
Merchant's Guild	600/5	Shipyard Bank			+ 100% gold; Revenue increase is over that provided by market place

Miner's Guild	300/3	Builder's Hall Hill or Mountain	Mechanician's Guild	Steam Cannons	Increases bonus for minerals by 50%, including magic power; +50% production
Oracle	500/4	Parthenon University			-2 unrest; Detects enemy units up to 4 squares away
Parthenon	400/3	Temple	Cathedral Oracle	Priests	+3 mana; Decreases unrest by 1
Sage's Guild	120/2	Library	Alchemist's Guild University		+3 research points; Allows use of nightshade
Sawmill	100/2	Forest Smithy	Forester's Guild Shipyard	Bowmen Longbowmen	+25% to production from forest square
Ship Wright's Guild	100/1	Open Ocean or River	Shipyard	Triremes	
Shipyard	200/2	Sawmill Ship Wright's Guild	Maritime Guild Merchant's Guild	Air Ships Galleys	
Shrine	100/1	Builder's Hall	Temple	Shaman	+1 mana; Allows use of nightshade and decreases unrest by 1

BUILDING TYPE	COST OF PRODUCTION / UPKEEP	REQUIRES:	ALLOWS BUILDING:	ALLOWS TROOPS	EFFECTS
Smithy	40/1		Armory Marketplace Sawmill Stable	Swordsmen	
Stable	80/2	Grasslands Smithy	Animist's Guild	Cavalry Centaurs Doom Drakes Dragon Turtles Horsebowmen Stag Beetles War Mammoths Wolf Riders	
Temple	200/2	Shrine	Animist's Guild Parthenon		+2 mana; Decreases unrest by 1; Allows use of nightshade
Trade Goods					+1 gold per 2 production
University	300/3	Sage's Guild Library	Oracle War College Wizard's Guild		+5 research points
War College	500/5	Armorer's Guild University			All new troops start as Veterans
Wizard's Guild	1000/5	Alchemist's Guild University		Magicians Warlocks	-3 mana; +8 research points

1. Alchemist's guilds allow troops to be equipped with superior magic weapons (with attack strength bonuses) if city resources include mithril or adamantium.

2. Animist's guilds increase the *rate* of food production, not total food produced by a city (i.e., farmers can harvest more than normal). The healing rate for having an animist's guild in a city is 50% higher than normal. Normally, units heal 5% of their hit points per game turn when they are outside of cities and 10% when they are on city squares. The presence of an animist's guild raises the healing rate to 15% of a unit's total hit points per game turn.

3. Barracks are required if a city is to maintain any normal troops. The only troops that can be maintained without barracks are engineers, galleys, magicians, priests, shamans, spearmen, triremes, warlocks and warships.

4. Growth is a percentage bonus based on the proportion of workers to total population. if a city has one worker in a population of four, the housing bonus is 25%. Beyond this, sawmills add 10% growth, and builder's halls add 15% growth.

NORMAL UNIT BONUSES FOR EXPERIENCE

Experience Level	Ring Symbol	Experience Points Required	Attack Strength	Bonus to Hit*	Defense	Resistance	Hits (Hit Points)
Recruit	-	0	-	-	-	-	-
Regular	1 Silver	20	+ 1	-	-	+ 1	-
Veteran	2 Silver	60	+ 1	-	+ 1	+ 2	-
Elite	3 Silver	120	+ 2	+ 1	+ 1	+ 3	+ 1
Ultra-Elite	1 Gold	**	+ 2	+ 2	+ 2	+ 4	+ 1
Champion	2 Gold	***	+ 3	+ 3	+ 2	+ 5	+ 2

TABLE H

The improvements shown above are added to the base attributes (before level raises) of the unit.

* Each increment in Bonus to Hit increases the base 30% chance to hit by 10%.

**Normal units may only be Ultra-Elite if their controlling wizard is a Warlord or if the wizard has cast crusade.

***Normal units may only be Champions if their controlling wizard is a Warlord *and* has cast crusade.

STANDARD AND RACE-SPECIFIC UNITS

Creature (# of Figures)	Race	Building Cost	Melee Attack	Ranged Attack	Defense	Resistance	Hits	Movement	Special Abilities
Air Ship (1)	Draconian	200	5	8 Rock (10)	5	8	20	4 Flying	Carries 2 Units
Beserkers (6)	Barbarian	80	6	2 Thrown	2	6	3	1	
Bowmen(6)	-	30	1	1 Missile (8)	1	4	1	1	
Cavalry (4)	-	40	4	-	2	4	3	2	First Strike
Catapult (1)	-	100	-	10 Rock (10)	2	4	10	1	Wall Crusher Long Range
Centaurs (4)	Beastmen	100	3	2 Missile (6)	3	5	3	2	
Doom Drakes (2)	Draconian	160	8	6 Breath	3	9	10	3 Flying	Fiery Breath
Dragon (1) Turtle	Lizardmen	120	10	5 Breath	8	8	15	2 Swim	Fiery Breath
Elven (4) Lords	High Elf	160	5	-	4	9	3	2	Armor Piercing; +2 Bonus to Hit; First Strike; Forester

TABLE I

Creature (# of Figures)	Race	Building Cost	Melee Attack	Ranged Attack	Defense	Resistance	Hits	Movement	Special Abilities
Engineers (6)	-	40	1	-	1	4	1	1	Construction; Wall Crusher
Galley (1)	-	100	6		3	6	20 Sailing	3 Units	Carries 5
Golem (1)	Dwarf	200	12	-	8	15	20	1	Immunity to Death Magic; Immunity to Poison
Griffins (2)	Nomad	200	9	-	5	7	10	2 Flying	Armor Piercing; First Strike
Halberdiers (6)	-	40	4	-	3	4	1	1	Negates First Strike
Hammerhands (6)	Dwarf	160	8	-	3	9	4	1	Mountaineer
Horsebowmen (4)	Nomad	60	4	2 Missile (8)	2	4	3	2	
Javelineers (6)	Lizardmen	120	4	3 Missile (6)	4	5	2	2 Swim	
Longbowmen (6)	High Elf	80	1	3 Missile (8)	2	6	1	1	+1 Bonus to Hit; Forester; Long Range Attack

Magicians (4)	-	120	1	6 Magic (4)	3	8	1	1	Can Cast Fireball Once Per Battle; Immunity to Missiles
Manticores (2)	Beastmen	160	5	-	3	6	7	2	Flying; Strength 6 Poisonous Sting
Minotaurs (2)	Beastmen	200	12	-	4	7	12	1	+2 Bonus to Hit; Large Shield
Nightblades (6)	Dark Elf	120	4	-	3	7	1	1	Invisible; Strength 1 Poison Attack (from Blade Venom)
Nightmares (4)	Dark Elf	160	8	5 Magic (4)	4	8	10	3 Flying	
Paladins (4)	High Men	200	6	-	5	8	4	2	Armor Piercing Attack; First Strike; Immunity to Magic; +1 Holy Bonus
Pegasi (2)	High Elf	160	5	3 Missile (8)	4	8	5	3 Flying	+1 Bonus to Hit; Forester
Pikemen (8)	Nomad or High Men	80	5	—	3	5	1	1	Armor Piercing Attack; Negates First Strike
Priests (4)	-	100	3	4 Magic (4)	4	7	1	1	Can Cast Healing Once Per Battle; Natural Healing; Purification

Creature (# of Figures)	Race	Building Cost	Melee Attack	Ranged Attack	Defense	Resistance	Hits	Movement	Special Abilities
Rangers (4)	Nomad	120	4	3 Missile (8)	4	6	2	2	Pathfinding; Scouting (Range 2)
Settlers (1)	-	60	-	-	1	4	10	1	Creates Outposts
Shaman (4)	-	50	2	2 Magic (4)	3	6	1	1	Natural Healing; Purification
Slingers (8)	Halfling	100	1	2 Missile (6)	2	8	1	1	Lucky
Spearmen (8)		10	1	-	2	4	1	1	
Stag Beetle (1)	Klackon	160	15	5 Breath	7	6	20	2	Fiery Breath
Steam Cannon (1)	Dwarf	180	-	12 Rock (10)	2	9	12	1	Mountaineer
Swordsmen (6)	-	20	3	-	2	4	1	1	Large Shield
Trireme (1)	-	60	4	-	2	4	10	2 Sailing	Carries 2 Units
Warlocks (6)	Dark Elf	240	1	9 Magic (4)	4	9	1	1	Can Cast Doom Bolt Once Per Battle; Immunity to Missiles
War Mammoths (2)	Troll	240	10	-	6	9	12	2	First Strike; Wall Crusher
Warship (1)	High Men or Barbarian	160	8	10 Rock (Unlimited)	5	7	30	4 Sailing	Carries Units; 3 Long Range

War Trolls (4)	Troll	160	8	-	4	8	5	2	Regeneration
Wolf Riders (4)	Gnoll	100	6	-	3	4	5	2	
Wyvern Riders (2)	Orc	200	5	-	5	7	10	3 Flying	Strength 6 Poisonous Attack

Note that although breath and thrown attacks are described under the Ranged Attacks column of the table, they are not technically ranged attacks. (see **Melee Attacks**).

SUMMONED CREATURES

Creature (# of Figures)	Magic	Upkeep	Melee	Ranged	Defense	Resistance	Hits	Movement	Special
Air Elemental (1)	Sorcery	-	15	-	6	9	10	5 Flying	Immunity to Death Magic; Invisible; Poison Immunity; Stoning Immunity; Weapon Immunity
Angel (1)	Life	15	13	-	5	8	15	3 Flying	Dispel Evil with touch +1 Holy Bonus; Immunity to Illusion; +2 Bonus to Hit
Archangel (1)	Life	20	15	-	6	12	18	4 Flying	+2 Holy Bonus; Can cast 40 spell points of life magic per battle; Immunity to Illusion +3 Bonus to Hit
Basilisk (1)	Nature	7	15	-	4	7	30	2	Stoning Gaze (-1 Save)

TABLE J

Behemoth (1)	Nature	15	25	-	6	10	45	2	
Chaos Spawn (1)	Chaos	12	1	-	5	10	15	1 Flying	Death Gaze (-4 Save); Doom Gaze (Strength 4); Stoning Gaze (-4 Save); Strength 4 Poisonous Bite
Chimera (4)	Chaos	10	7	4 Breath	4	8	8	2 Flying	Fiery Breath
Cockatrices (4)	Nature	8	4	-	3	7	3	2 Flying	Stoning Touch (-3 Save)
Colossus (1)	Nature	17	20	20 Rock (2)	8	15	30	2	First Strike; Poison Immunity; Stoning Immunity; Wall Crusher
Death Knights (4)	Death	8	7	-	5	9	8	3	Armor Piercing Attack; +2 Bonus to Hit; First Strike; Lifestealing Touch (-4 Save)
Demon (1)	Death	-	14	-	5	7	12	2 Flying	

Creature (# of Figures)	Magic	Upkeep	Melee	Ranged	Defense	Resistance	Hits	Movement	Special
Demon Lord (1)	Death	15	20	10 Magic (8)	7	12	20	2 Flying	Lifestealing Attack on both ranged *and* melee attacks (-1 Save); Causes Fear; Can summon 3 Demons during battle
Djinn (1)	Sorcery	17	15	8 Magic (4)	6	10	20	3 Flying	Teleport; Greater Wind Walking; Weapon Immunity; Can cast 20 spell points sorcery magic during combat
Doom Bat (1)	Chaos	8	10	-	5	7	20	4 Flying	Fire Immunity; Immolation
Earth Elemental (1)	Nature	-	25	-	4	8	30	1	Poison Immunity; Stoning Immunity; Wall crusher
Efreet (1)	Chaos	15	9	9 Magic	3	10	12	3 Flying	+2 Bonus to Hit; Can cast 20 spell points of chaos magic per battle; Fire Immunity

Fire Elemental (1)	Chaos	-	12	-	4	6	10	1	Fire Immunity; Poison Immunity; Stoning Immunity
Fire Giant (1)	Chaos	3	10	10 Rock (2)	5	7	15	2	Fire Immunity; Mountaineer; Wall Crusher
Floating Island (1)	Sorcery	5	-	-	0	10	45	2 Sailing	Can carry 8 other units
Gargoyles (4)	Chaos	5	4	-	8	7	4	2 Flying	Poison Immunity; Stoning Immunity
Ghouls (4)	Death	1	4	-	3	6	3	1	Strength 1 Poisonous Attack; Creates Undead
Giant Spiders (2)	Nature	4	4	-	3	7	10	2	Web; Strength 4 Poisonous Bite
Gorgons (4)	Nature	15	8	-	6	9	9	2 Flying	Stoning Gaze (-2 Save)
Great Drake (1)	Chaos	30	25	25 Breath	5	12	30	2 Flying	Fiery Breath
Great Wyrm (1)	Nature	20	25	-	6	12	45	3 Teleport	Strength 15 Poisonous bite; Teleport

Creature (# of Figures)	Magic	Upkeep	Melee	Ranged	Defense	Resistance	Hits	Movement	Special
Guardian Spirit (1)	Life	1	10	-	4	10	10	1	Meld with Nodes; +1 Resistance to All
Hell Hounds (4)	Chaos	1	3	3 Breath	2	6	4	2	Fiery Breath
Hydra Heads (9)	Chaos	14	6	5 Breath	4	11	10	1	Fiery Breath; Regeneration; Each head is equivalent to 1 figure
Magic Spirit (1)	Arcane	1	5	-	4	8	10	1	Meld with Nodes
Nagas (2)	Sorcery	2	4	-	3	7	6	1 Swim	Strength 4 Poison Spittle Attack (First Strike); +1 Bonus To Hit
Night Stalker (1)	Death	1	7	-	3	8	10	2	Death Gaze (-2 Save); Invisible
Phantom Beast (1)	Sorcery	-	18	-	0	8	20	2	Illusionary Attack; Non-Corporeal; Immunity to Death Magic
Phantom Warriors (6)	Sorcery	-	3	-	0	6	1	1	Illusionary Attack; Non-Corporeal; Immunity to Death Magic

Shadow Demons (4)	Death	7	5	4 Magic (8)	4	8	5	1 Flying	Non-Corporeal; Planar Travel; Regeneration
Skeletons (6)	Death	-	3	-	4	5	1	1	Immunity to Missiles
Sky Drake (1)	Sorcery	25	20	20 Breath	7	14	25	4 Flying	Lightning Breath Immunity to Illusions Immunity to Magic
Sprites (4)	Nature	3	2	3 Magic (4)	2	8	1	2 Flying	Forester
Stone Giant (1)	Nature	9	15	15 Rock (2)	7	9	20	2	Mountaineer; Poison Immunity; Stoning Immunity; Wall Crusher
Storm Giants (1)	Sorcery	10	12	10 Magic (4)	4	9	20	2	Lightning Attack (Armor Piercing) on both ranged *and* melee attacks; Wall Crusher
Unicorn (4)	Life	5	5	-	3	7	6	2 Teleport	+1 Bonus to Hit; Poison Immunity; +2 Resistance to All
War Bears (2)	Nature	2	7	-	3	6	8	2	

Creature (# of Figures)	Magic	Upkeep	Melee	Ranged	Defense	Resistance	Hits	Movement	Special
Werewolves (6)	Death	5	5	-	1	6	5	2	Weapon Immunity
Wraiths (4)	Death	5	7	-	5	8	8	2 Flying	Lifestealing Touch (-3 Save); Non-Corporeal; Weapon Immunity
Zombies (6)	Death	-	3	-	2	3	3	1	

Note that "saves" decrease the target's ability to resist the spell. Each reduction has the effect of negating one enemy resistance (i.e., cross) or, in other words, reducing the enemy's chance to save by 10% per point.

Teleport under Movement refers to the ability to teleport during combat, a special ability (see **Special Unit Abilities**).

Note that although breath and thrown attacks are described under the Ranged Attacks column of the table, they are not technically ranged attacks (see **Melee Attacks**).

HERO EXPERIENCE LEVELS

Experience Level	Ring Symbol	Experience Points Required	Attack Strength	Bonus to Hit	Defense	Resistance	Hits (Hit Points)
Hero	-	-	-	-	-	-	-
Myrmidon	1 Silver	20	+ 1	-	+ 1	+ 1	+ 1
Captain	2 Silver	60	+ 2	-	+ 1	+ 2	+ 2
Commander	3 Silver	120	+ 3	+ 1	+ 2	+ 3	+ 3
Champion	1 Gold	200	+ 4	+ 1	+ 2	+ 4	+ 4
Lord	2 Gold	300	+ 5	+ 2	+ 3	+ 5	+ 5
Grand Lord	3 Gold	450	+ 6	+ 2	+ 3	+ 6	+ 6
Super Hero	1 Red	600	+ 7	+ 3	+ 4	+ 7	+ 7
Demi-God	2 Red	1000	+ 8	+ 3	+ 4	+ 8	+ 8

NON SPELL-SPECIFIC ARTIFACT ENCHANTMENTS

Item	Attack	To Hit*	Defense	Movement	Resistance	Spell Skill	Spell Charge	Spell Save**	Effects
Axe	+6	+2	none	none	none	+10	none	none	Melee and Thrown
Bow	+6	+3	+3	none	none	+10	none	none	Ranged
Chain Mail	none	none	+6	+4	+6	none	none	none	+1 Defense
Mace	+4	+3	+1	none	none	+10	none	none	Melee
Miscellaneous	+4	+2	+4	+3	+6	+15	none	-4	All Attacks
Plate Mail	none	none	+6	+4	+6	none	none	none	+2 Defense
Shield	none	none	+6	+4	+6	none	none	none	+2 Ranged Defense
Staff	+6	+3	+3	none	none	+20	+4	-4	Melee and Ranged
Sword	+3	+3	+3	none	none	+10	none	none	Melee
Wand	+2	+1	none	none	none	+10	+3	-2	Melee and Ranged

TABLE L

* Each +1 to hit increases the base 30% chance to hit by +10%.

** Each -1 to Spell Save decreases the opponent's ability to resist this unit's spell attacks against it by 10% (i.e., it negates one of the enemy unit's crosses).

Note that all increments for adding the above bonuses to artifacts are in increments of +1 except for Spell Skill which is added in +5 increments and Spell Save which is in -1 increments.

The Effects column describes the types of magical attacks that are placed into or affected by the weapon. Note that if an item affects melee attacks (whether "attack" or "to hit"), then it *transforms that hero's standard melee attacks into magic melee attacks* (i.e., attacks that can overcome Weapon Immunity, see **Special Unit Abilities**) and adds the appropriate strength or to hit to the attack. The same holds if the item affects ranged attacks. If the hero's attacks in those areas are already magic, then the item merely makes the attacks more powerful (by the specified amount).

The Effects column in the case of defensive artifacts describes the bonuses that are inherent to the item itself (before further enchantment).

Ranged defense is defense specifically to ranged missile, rock, magic ranged, thrown and breath attacks. Because the defense depends on the attack, shield icons are not added to the hero's display in the *unit statistics window*.

SPELL-SPECIFIC ARTIFACT ENCHANTMENTS

Enchantment	Required Magic Realm and Rank	Weapon	Armor	Miscellaneous	Effect If Not Same as Spell*
Bless	Life 2	-	Yes	Yes	
Endurance	Life 2	-	Yes	Yes	
Holy Avenger	Life 3	All but staff & wand	-	-	Protection from Evil and Dispel Evil
Invulnerability	Life 5	-	Yes	Yes	
Lion Heart	Life 6	-	-	Yes	
Planar Travel	Life 5	All but staff & wand	-	Yes	
Righteousness	Life 4	-	Yes	Yes	
True Sight	Life 6	-	-	Yes	
Cloak of Fear	Death 2	-	Yes	Yes	
Death	Death 3	All	-	-	Save at -3 or die
Power Drain	Death 4	All	-	-	Opponent wizard loses 2 to 20 mana
Vampiric	Death 5	All but bow, staff & wand	-	-	Life Drain spell

Wraithform	Death 4	-	Yes	Yes	
Chaos	Chaos 6	All but wand	-	-	Wielder is at half attack strength, but the attack allows no defense; i.e., it *does damage automatically*
Destruction	Chaos 5	All	-	-	Opponent must resist or be disintegrated
Flaming	Chaos 2	All	-	-	+3 attack strength
Lightning	Chaos 5	All	-	-	Armor Piercing
Elemental Armor	Nature 4	All	Yes	Yes	
Giant Strength	Nature 3	All but staff, bow & wand	-	-	+2 attack strength
Pathfinding	Nature 3	-	-	Yes	
Petrifying	Nature 2	All	-	-	Opponent must resist at -1 or be stoned
Regeneration	Nature 6	-	-	Yes	
Resist Elements	Nature 2	All	Yes	Yes	
Waterwalking	Nature 2	-	-	Yes	
Flight	Sorcery 3	-	-	Yes	

Enchantment	Required Magic Realm and Rank	Weapon	Armor	Miscellaneous	Effect If Not Same as
Guardian Wind	Sorcery 3	All but staff, bow & wand	Yes	Yes	
Haste	Sorcery 7	All but staff & wand	-	-	
Invisibility	Sorcery 5	-	-	Yes	
Magic Immunity	Sorcery 5	All	Yes	Yes	
Phantasmal	Sorcery 6	All	-	-	Illusory Attack
Resist Magic	Sorcery 2	All	Yes	Yes	

Note that "saves" decrease the target's ability to resist the spell by 10% per -1 point specified.

ATTACK TYPES				
Attack Type	**Timing Relative to Melee Combat**	**In Addition to Melee?**	**Offensive Only?**	**Defense to Attack**
Breath	Before Melee	Yes	Yes	Defense
First Strike Weapons	Before Melee	Yes	Yes	Defense
Gaze	Before Melee	Yes	No	Resistance
Lifestealing Attacks	Simultaneous	Yes	No	Resistance
Melee	N/A	N/A	No	Defense
Poison Attacks	Simultaneous	Yes	No	Resistance
Ranged	Instead of Melee	No	Yes	(Ranged) Defense*
Thrown	Before Melee	Yes	Yes	Defense
Touch	Simultaneous	Yes	No	Resistance

If a unit is listed as "Yes" in the Offensive Only category, its ability only applies in melee situations where it is the *attacking* unit (i.e., it is currently the active unit expending half its movement allowance to initiate the melee attack). A "No" means that the indicated attack type is used in melee combats in *both offensive and defensive* situations (i.e., this attack can also occur when a unit is defending itself against an enemy's attack).

* Defense with any ranged defense bonuses is used to protect against ranged damage (whether from missile, magic or rock attacks).

SPECIAL NOTE: ITEMMAKE

Included with your copy of *Master of Magic* is a special game utility called *Itemmake*, which allows you to alter the random treasures you will find in your games. To use *Itemmake*, before you start the game, change to the directory in which the game is located (usually Magic). Type *itemmake* at the prompt.

The *itemmake screen* looks a lot like the *artifact creation screen* pictured in the *Master of Magic* manual on page 89. The difference is that under the window which displays the name of the current item, you see the label *"Item 1."* Click on the arrows to the left and right of this label to scroll through the items one at a time. There are 250 items available. Available for what? Funny you should ask.

This utility lets you alter any listed item in any way you choose: add to the attack strength, lower the defense strength, twiddle with the spells embedded in it—whatever you wish. You can tweak an item to make it more powerful, or change every attribute, in effect making your own unique magic items.

There are only two caveats: First, just as with artifacts, items created with *Itemmake* can only hold a maximum of four enchantments. Second, the more expensive your item is to make, the more powerful the monsters that guard it will be, when you find it.

Designing with Itemmake

All right, on to the nitty gritty. The *itemmake screen* has five windows: the *icon window*, the *item name window*, the *attribute enchantments window*, the *spell-specific enchantments window*, and the *cost window*. Finally, you have the *weapon buttons*, and the *OK button*. Here's your whirlwind tour:

In the top left corner, the *icon window* shows a picture of the current item. Click on the arrows below it until you find an image you like.

To the right is the *item name window*, which displays the name of the current item, and just below that, the item's number. Click on the item's name and backspace to remove text you don't like. Insert the name you prefer.

To the right again, you find the *weapon buttons*. Choose the type of item you'd like to create from these buttons. If you're not sure what it is, choose Misc (Miscellaneous).

Now choose the actual effects you'd like this item to have. The *attribute enchantments window* just below the *icon* and *item name windows* lists possible enhancements to specific attributes: attack, defense, movement, resistance, and general magical effects (like casting ability). Highlighted attributes are already selected. Select or deselect attributes by clicking on them. **Creating Artifacts**, pages 88-90, gives a more detailed discussion of these effects.

The *spell-specific enchantments window* to the right lists effects equivalent or similar to spells of the same name. You can choose a maximum of four to embed in each item. Again, highlighted items are already selected.

As you alter or construct items, notice that the *cost window* changes to reflect your alterations. More expensive items are guarded by tougher monsters!

When you are satisfied with the changes you have made to the item, use the arrow keys to the left and right of the item number to scroll to the next item you wish to change.

You can alter as many or as few items as you like, by scrolling through the item numbers. When you have changed as many as you wish to this session, click on the *OK button*. This saves your changes, and puts you back at the DOS prompt. To play immediately, type **magic**. The items you altered will be randomly distributed when the game builds a new world.

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